# FIGURE 1

```
   1   acggcatcca gtacagaggg gctggacttg gacccctgca gcagccctgc acaggagaag
  61   cggcatataa agccgcgctg cccgggagcc gctcggccac gtccaccgga gcatcctgca
 121   ctgcagggcc ggtctctcgc tccagcagag cctgcgcctt tctgactcgg tccggaacac
 181   tgaaaccagt catcactgca tcttttggc aaaccaggag ctcagctgca ggaggcagga
 241   tggtctggag gctggtcctg ctggctctgt gggtgtggcc cagcacgcaa gctggtcacc
 301   aggacaaaga cacgaccttc gacctttca gtatcagcaa catcaaccgc aagaccattg
 361   gcgccaagca gttccgcggg cccgaccccg gcgtgccggc ttaccgcttc gtgcgctttg
 421   actacatccc accggtgaac gcagatgacc tcagcaagat caccaagatc atgcggcaga
 481   aggagggctt cttcctcacg gcccagctca agcaggacgg caagtccagg ggcacgctgt
 541   tggctctgga gggccccggt ctctcccaga ggcagttcga gatcgtctcc aacggccccg
 601   cggacacgct ggatctcacc tactggattg acggcacccg gcatgtggtc tccctggagg
 661   acgtcggcct ggctgactcg cagtggaaga acgtcaccgt gcaggtggct ggcgagacct
 721   acagcttgca cgtgggctgc gacctcatag gaccagttgc tctggacgag cccttctacg
 781   agcacctgca ggcggaaaag agccggatgt acgtggccaa aggctctgcc agagagagtc
 841   acttcagggg tttgcttcag aacgtccacc tagtgtttga aaactctgtg gaagatattc
 901   taagcaagaa gggttgccag caaggccagg gagctgagat caacgccatc agtgagaaca
 961   cagagacgct gcgcctgggt ccgcatgtca ccaccgagta cgtgggcccc agctcggaga
1021   ggaggcccga ggtgtgcgaa cgctcgtgcg aggagctggg aaacatggtc caggagctct
1081   cggggctcca cgtcctcgtg aaccagctca gcgagaacct caagagagtg tcgaatgata
1141   accagtttct ctgggagctc attggtggcc ctcctaagac aaggaacatg tcagcttgct
1201   ggcaggatgg ccggttcttt gcggaaaatg aaacgtgggt ggtggacagc tgcaccacgt
1261   gtacctgcaa gaaatttaaa accatttgcc accaaatcac ctgcccgcct gcaacctgcg
1321   ccagtccatc ctttgtggaa ggcgaatgct gcccttcctg cctccactcg gtggacggtg
1381   aggagggctg gtctccgtgg gcagagtgga cccagtgctc cgtgacgtgt ggctctggga
1441   cccagcagag aggccggtcc tgtgacgtca ccagcaacac ctgcttgggg ccctcgatcc
1501   agacacgggc ttgcagtctg agcaagtgtg acacccgcat ccggcaggac ggcggctgga
1561   gccactggtc accttggtct tcatgctctg tgacctgtgg agttggcaat atcacacgca
1621   tccgtctctg caactcccca gtgccccaga tggggggcaa gaattgcaaa gggagtggcc
1681   gggagaccaa agcctgccag ggcgccccat gcccaatcga tggccgctgg agcccctggt
1741   ccccgtggtc ggcctgcact gtcacctgtg ccggtgggat ccgggagcgc acccgggtct
1801   gcaacagccc tgagcctcag tacggaggga aggcctgcgt gggggatgtg caggagcgtc
1861   agatgtgcaa caagaggagc tgccccgtgg atggctgttt atccaacccc tgcttcccgg
1921   gagcccagtg cagcagcttc cccgatgggt cctggtcatg cggcttctgc cctgtgggct
1981   tcttgggcaa tggcacccac tgtgaggacc tggacgagtg tgccctggtc cccgacatct
2041   gcttctccac cagcaaggtg cctcgctgtg tcaacactca gcctggcttc cactgcctgc
2101   cctgcccgcc ccgatacaga gggaaccagc ccgtcggggt cggcctggaa gcagccaaga
2161   cggaaaagca agtgtgtgag cccgaaaacc catgcaagga caagacacac aactgccaca
2221   agcacgcgga gtgcatctac ctgggtcact tcagcgaccc catgtacaag tgcgagtgcc
2281   agacaggcta cgcgggcgac gggctcatct gcggggagga ctcggacctg gacggctggc
2341   ccaacctcaa tctggtctgc gccaccaacg ccacctacca ctgcatcaag gataactgcc
2401   cccatctgcc aaattctggg caggaagact ttgacaagga cgggattggc gatgcctgtg
2461   atgatgacga tgacaatgac ggtgtgaccg atgagaagga caactgccag ctcctcttca
2521   atccccgcca ggctgactat gacaaggatg aggttgggga ccgctgtgac aactgccctt
2581   acgtgcacaa ccctgcccag atcgacacag acaacaatgg agagggtgac gcctgctccg
2641   tggacattga tgggggacgat gtcttcaatg aacgagacaa ttgtccctac gtctacaaca
2701   ctgaccagag ggacacggat ggtgacggtg tgggggatca ctgtgacaac tgcccccctgg
2761   tgcacaaccc tgaccagacc gacgtggaca atgaccttgt tggggaccag tgtgacaaca
2821   acgaggacat agatgacgac ggccaccaga caaccaggga caactgcccc tacatctcca
2881   acgccaacca ggctgaccat gacagagacg gccagggcga cgcctgtgac cctgatgatg
2941   acaacgatgg cgtccccgat gacagggaca actgccggct gtgttcaac ccagaccagg
3001   aggacttgga cggtgatgga cggggtgata tttgtaaaga tgattttgac aatgacaaca
3061   tcccagatat tgatgatgtg tgtcctgaaa acaatgccat cagtgagaca gacttcagga
```

FIGURE 1 (continued)

```
3121 acttccagat ggtccccttg gatcccaaag ggaccaccca aattgatccc aactgggtca
3181 ttcgccatca aggcaaggag ctggttcaga cagccaactc ggaccccggc atcgctgtag
3241 gttttgacga gtttgggtct gtggacttca gtggcacatt ctacgtaaac actgaccggg
3301 acgacgacta tgctggcttc gtctttggtt accagtcaag cagccgcttc tatgtggtga
3361 tgtggaagca ggtgacgcag acctactggg aggaccagcc cacgcgggcc tatggctact
3421 ccggcgtgtc cctcaaggtg gtgaactcca ccacggggac gggcgagcac ctgaggaacg
3481 cgctgtggca cacggggaac acgccggggc aggtgcgaac cttatggcac gaccccagga
3541 acattggctg gaaggactac acggcctata ggtggcacct gactcacagg cccaagaccg
3601 gctacatcag agtcttagtg catgaaggaa aacaggtcat ggcagactca ggacctatct
3661 atgaccaaac ctacgctggc gggcggctgg gtctatttgt cttctctcaa gaaatggtct
3721 atttctcaga cctcaagtac gaatgcagag atatttaaac aagatttgct gcatttccgg
3781 caatgccctg tgcatgccat ggtccctaga cacctcagtt cattgtggtc cttgcggctt
3841 ctctctctag cagcacctcc tgtcccttga ccttaactct gatggttctt cacctcctgc
3901 cagcaacccc aaacccaagt gccttcagag gataaatatc aatggaactc agagatgaac
3961 atctaaccca ctagaggaaa ccagtttggt gatatatgag actttatgtg gagtgaaaat
4021 tgggcatgcc attacattgc tttttcttgt ttgtttaaaa agaatgacgt ttacatataa
4081 aatgtaatta cttattgtat ttatgtgtat atggagttga agggaatact gtgcataagc
4141 cattatgata aattaagcat gaaaaatatt gctgaactac ttttggtgct taaagttgtc
4201 actattcttg aattagagtt gctctacaat gacacacaaa tcccgctaaa taaattataa
4261 acaagggtca attcaaattt gaagtaatgt tttagtaagg agagattaga agacaacagg
4321 catagcaaat gacataagct accgattaac taatcggaac atgtaaaaca gttacaaaaa
4381 taaacgaact ctcctcttgt cctacaatga aagccctcat gtgcagtaga gatgcagttt
4441 catcaaagaa caaacatcct tgcaaatggg tgtgacgcgg ttccagatgt ggatttggca
4501 aaacctcatt taagtaaaag gttagcagag caaagtgcgg tgctttagct gctgcttgtg
4561 ccgttgtggc gtcggggagg ctcctgcctg agcttccttc cccagctttg ctgcctgaga
4621 ggaaccagag cagacgcaca ggccggaaaa ggcgcatcta acgcgtatct aggctttggt
4681 aactgcggac aagttgcttt tacctgattt gatgatacat ttcattaagg ttccagttat
4741 aaatattttg ttaatattta ttaagtgact atagaatgca actccattta ccagtaactt
4801 attttaaata tgcctagtaa cacatatgta gtataatttc tagaaacaaa catctaataa
4861 gtatataatc ctgtgaaaat atgaggcttg ataatattag gttgtcacga tgaagcatgc
4921 tagaagctgt aacagaatac atagagaata atgaggagtt tatgatggaa ccttaatata
4981 taatgttgcc agcgatttta gttcaatatt tgttactgtt atctatctgc tgtatatgga
5041 attctttaa ttcaaacgct gaaaacgaat cagcatttag tcttgccagg cacacccaat
5101 aatcagtcat gtgtaatatg cacaagtttg ttttttgtttt tgttttttttt gttggttggt
5161 tttttttgctt taagttgcat gatctttctg caggaaatag tcactcatcc cactccacat
5221 aaggggttta gtaagagaag tctgtctgtc tgatgatgga taggggggcaa atctttttcc
5281 cctttctgtt aatagtcatc acatttctat gccaaacagg aacgatccat aactttagtc
5341 ttaatgtaca cattgcattt tgataaaatt aattttgttg tttcctttga ggttgatcgt
5401 tgtgttgttt tgctgcactt tttactttt tgcgtgtgga gctgtattcc cgagacaacg
5461 aagcgttggg atacttcatt aaatgtagcg actgtcaaca gcgtgcaggt tttctgtttc
5521 tgtgttgtgg ggtcaaccgt acaatggtgt gggaatgacg atgatgtgaa tatttagaat
5581 gtaccatatt ttttgtaaat tatttatgtt tttctaaaca aatttatcgt ataggttgat
5641 gaaacgtcat gtgttttgcc aaagactgta aatatttatt tatgtgttca catggtcaaa
5701 atttcaccac tgaaaccctg cacttagcta gaacctcatt tttaaagatt aacaacagga
5761 aataaattgt aaaaaaggtt ttct
```

# FIGURE 2

```
1     mvwrlvllal wvwpstqagh qdkdttfdlf sisninrkti gakqfrgpdp gvpayrfvrf
61    dyippvnadd lskitkimrq kegffltaql kqdgksrgtl lalegpglsq rqfeivsngp
121   adtldltywi dgtrhvvsle dvgladsqwk nvtvqvaget yslhvgcdli gpvaldepfy
181   ehlqaeksrm yvakgsares hfrgllqnvh lvfensvedi lskkgcqqgq gaeinaisen
241   tetlrlgphv tteyvgpsse rrpevcersc eelgnmvqel sglhvlvnql senlkrvsnd
301   nqflweligg ppktrnmsac wqdgrffaen etwvvdsctt ctckkfktic hqitcppatc
361   aspsfvegec cpsclhsvdg eegwspwaew tqcsvtcgsg tqqrgrscdv tsntclgpsi
421   qtracslskc dtrirqdggw shwspwsscs vtcgvgnitr irlcnspvpq mggknckgsg
481   retkacqgap cpidgrwspw spwsactvtc aggirertrv cnspepqygg kacvgdvqer
541   qmcnkrscpv dgclsnpcfp gaqcssfpdg swscgfcpvg flgngthced ldecalvpdi
601   cfstskvprc vntqpgfhcl pcppryrgnq pvgvgleaak tekqvcepen pckdkthnch
661   khaeciylgh fsdpmykcec qtgyagdgli cgedsdldgw pnlnlvcatn atyhcikdnc
721   phlpnsgqed fdkdgigdac dddddndgvt dekdncqllf nprqadydkd evgdrcdncp
781   yvhnpaqidt dnngegdacs vdidgddvfn erdncpyvyn tdqrdtdgdg vgdhcdncpl
841   vhnpdqtdvd ndlvgdqcdn nedidddghq nnqdncpyis nanqadhdrd gqgdacdpdd
901   dndgvpddrd ncrlvfnpdq edldgdgrgd ickddfdndn ipdiddvcpe nnaisetdfr
961   nfqmvpldpk gttqidpnwv irhqgkelvq tansdpgiav gfdefgsvdf sgtfyvntdr
1021  dddyagfvfg yqsssrfyvv mwkqvtqtyw edqptraygy sgvslkvvns ttgtgehlrn
1081  alwhtgntpg qvrtlwhdpr nigwkdytay rwhlthrpkt gyirvlvheg kqvmadsgpi
1141  ydqtyaggrl glfvfsqemv yfsdlkyecr di
```

# FIGURE 3

```
   1  actttcttgc tgctctgcct gcatggacct gtgacaggca tcatctatng aatctcatgn
  61  agcgtcgact ccctgcccca ggcattggtg agtggcaagt gagagctgct cacaggcatc
 121  aaagggtcaa aatagcaccc aaggccgggc atgannncac gcctgtaatc ccagtacttt
 181  gggaggctga ggtaggcgga tcacctgagg tcaggagctc aaagccagcc tggccaacat
 241  ggagaaaccc cgtctctact aaaaatacaa aaattagctg ggtgtggtgg tgtgtgcctg
 301  taatcccagc tacttggagg ctgaggcagg agaataactt gaacccggga ggcaaaagtt
 361  gcagtgagca agattgcacc attgcactcg agcctgggga aaagagcaa gactccatct
 421  caaaaaaaaa aaaaaaaat tgcacctaag cccaagccca gaaggtggcc ccgaacctgg
 481  gccttccttt gaagccaggc ctggtatttg ccaagatcgt gcctcctgcc cccacatcac
 541  caacgttaac tgccctccat tagctggtgc tgcctgggtg ctgcgtgggc gctggcgtgt
 601  gaaatggcaa catgaggccg tgtctactga gccaggcatc ttagtgcttt acacagagaa
 661  gtgaaacctc ctagcaaccc tgtgagttag gtaccatttg attcccattt ttcagataag
 721  gaaaccaagg cacaaagtgg ttggtaggtg gactaaggtc acccaacaaa tggaggcaaa
 781  acgggacacg tgtccccacc aggagccacc agctgtccct ccttctccat cccacagact
 841  gcgtgaagcc ctgggctact ctggctggat ggtatcaagt gtcacattct gtggagccag
 901  gatgttcctc caatcctta atcccaaatc ttttattgtg tttgttttgt tttgttttga
 961  cagagtcttg ctctgtcgtc caggctggag tgctgtggtg caatctcagc tcactgcaac
1021  ctctgcctcc tgggttcaag tgattctcct gcctcatcct ccctagtagc tgggactaca
1081  ggtgcgcacc accaagcccg gctaattttt gtattttttg ttgagacggg gtttcaccat
1141  gttggccagg ctggttatga actcctgacc tcaaatgatc tgcctgcctc agcctcccaa
1201  agtgctggca ttacaggcat gagccaccat gcctggccta atcccaaatc ttaaacctac
1261  ttttcctggt tctgcctcta gtgaaatcaa agatccctcc gctgctgtcc ctatgggaat
1321  gtggacaggg atgacacctc tcgccagctc tgggtggccc ctctggtctg gtcctttgct
1381  gcccagctcc tcaagtcctc ctcaacaccc ctcttctcca gccctgctgc cactctcccc
1441  acctgagtac agaccctcat catttcccac tgggcccct cttctcgtcc ccccagtccc
1501  tnctccctag ntccatttat ttattctnat tttgnnagac ggagttttgc tcttgttgcc
1561  caagctggag tgcaatggcg cgatctcagc tcactgcaac ctctgcctcc caggttcaag
1621  cgattttccn tgcctcagcc tcccaagtag ctgggattac aggcatgcac caccacaccc
1681  ggctaatttt ngtattttta gtagaggtgg ggtttctcca tgttggtcan ggctggtctc
1741  gaactcccga cctcaggtga tccacctgcc tcagcctgcc aaagtgctgg gattnacagg
1801  cgtgancanc tgntgnccct gcccctagtc catttttttt tttttaatt gatcattctt
1861  gggtgtttct cgcagagggg gatttggcag ggtcacagga caatagtgga gggaaggtca
1921  gcagataaac aagtgaacaa aggtctctgg ttttcctagg cagaggaccc tgtggccttc
1981  cgcagtgttt gtgtccctgg gtacttgaga ttagggagtg gtgatgactc ttaaggagca
2041  tgctgccttc aagcatctgt ttaacaaagc acatcttgca ccgcccttaa tccattcaac
2101  cctgagtgga tacagcacat gtttcagaga gcacagggtt gggggtaagg tcacagatca
2161  acaggatccc aaggcagaag aatttttctt agtacagaac aaaatgaaaa gtctcccacg
2221  tctacctctt ctacacaga cacggcaacc atccgatttc tcaatctttt ccccacccctt
2281  cccccctttc tattccacaa aaccgccatt gtcatcatgg cccgttctca atgagctgtt
2341  gggtacacct cccagaccgg gtggtggccg ggcagagggg ctcctcactt cccagtaggg
2401  gcggccgggc agaggcgccc ctcancctcc cggacggggc ggctggccgg gcggggggct
2461  gaccccccca cctccctccc ggacggggcg gccggccagg cagaggggct cctcacttcc
2521  cagtaggggc ggccgggcag aggcgcccct cacctcccgg acagggcggc tggccgggca
2581  ggggctgat ccccccacct ccctcccgga cggggaggct ggccgggcgg ggggctgacc
2641  cccctgacc cccccacctc cctccggac ggggcggctg ctgggcggg gggctgaccc
2701  ccacacctcc ctcccggacg gggcagctgg ccgggcgggg ggctgacccc cccacctccc
2761  tcctggacgg agcggctggc cgggcagagg ggctcctcac ttcccagtag gggcggccgg
2821  gcagaggcgc ccctcacctc ccggacgggg cggctggccg ggncagggggg ctgatcgccc
2881  cacnctccct cccggacggg gaggctggcc gggcggggggg ctgaccccccc cacctccctg
2941  ccggacgagg tggctgccgg gcagagacgc tcctcacttc ccagacgggg tggcttctgg
3001  acggatgggc tcctcacttc tcagacgggg cggttgccgg gcggagggtc tcctcacttc
```

# FIGURE 3 (continued)

```
3061 tcagaggggg cggccgggca gagacgctcc tcacatcccg gacggggcgg cagggcagag
3121 gtgctcccca catctcagac gatgggcggc cgggcagaga cgctcctcac ttcccagatg
3181 ggatggctgc agggaagagg cgctcctcac ttcctagatg ggatggcggc caggcagaga
3241 cgctcctcac gtcccagacg atgggcggct gggcagagac gctcctcact tcccagacgg
3301 ggtggcggcc gggcagaggc tgcaatctcg gcactttggg aggccaaggc aggctgctgg
3361 gaggtgaagg ttgtagcgag ccgagatcac gccactgcac tccagcctgg gcaccattga
3421 gcacggagtg aacgagactc cgtctgcaat cccggcacct caggatgccg aggctggcgg
3481 atcactcgcg gttaggagct ggagaccagc ccggccaaca cagcaaaacc ccgtctccac
3541 caaaaaaata cgaaaaccag tcaggtgtgg cggcgcgcac ctgcaatcgc aggcagtcgg
3601 caggctgagg caggagaatc aggcagcagt accgtccagc ttcagctcgg catcagaggg
3661 angaccgtgg agagagggag agggagaccg tggggagagg gagagggaga gggagggaga
3721 gggagaggga gagggagagg gagagagcta gtccattttt atanncatgg ctctgaggat
3781 gctccaatct gaccacagct tctgttcact tagcgccctg ccccggtgtc tcatcacctt
3841 ggggataaaa tccacactct gagagtgagt gcaaagtcct tcctggcgtg gcctctgcct
3901 cctccatttc ctcaggcctt gctctaccac acaagtccct ctattagtgc ctcccgatgg
3961 ccagctccct ggcagggctg atagtgataa aatgttcagt agtcagcaat aaagaggcaa
4021 aaacagcaac actgatttat agatatgaaa tcaaccagat gtatcagcca agttgccagc
4081 attcctttct tggtcacaat atcttttatt ccaaacatcc tttctattta ttttttgtag
4141 ttaagatttt attacttctt ttgtaaaacg gtggtgagaa taagggacta ttttttttaa
4201 atgtccttac ttggcaaact aaaaaatgtt tgcaactcta gtaagactcc actgggagct
4261 caggggctgg ggtgcctgat ctggccctaa agccccannn nnnnnnnnnn nnnnncngac
4321 actgacctgg tgcctgcgtg attcttcttc attgttccca gacaggggcc aggaaatgga
4381 atgaaagcag ccactgtctg aagagctgga gaccatcatc tgcctctgga gcccagaga
4441 acctcggctc agacagaagg acagagactg agggaaggga gagagactgt gacagagaag
4501 cagaggaggg tgacagagtc agggaggaac aaaacagcct gcagtgggag cagagacaga
4561 aatgtggggg acccacaggg angggaggg agggaagggg agggacggag ggagggacaa
4621 ctgccgtcca agtggctgtg agagcctggg gctggggaga ggcaccctcc tcctgttggc
4681 ttctcataca gtctctatca ggggacccag gacacaagaa gcaaattcat ctttgggtcc
4741 acccttcagc tctagaagtc tagggcctgg ccaggtcctc tgaaggggtc tctggcccca
4801 ggcagcttcc tgcccccctg cgtggccccc caagcccttc tcaagagccc ttcagtaaat
4861 aaattcactg gaagacatca atgatgggtc ataggaggtg ttcctagggg agaaaatgac
4921 atttagtttt tagctcactt ggagccattt gctttaagaa gcacctcttg gccaggcgca
4981 gtgactcacg cctgtaatcc caacagtttg ggaggccgag gtgggcggat cacctgaggt
5041 caggagttca agaccagcct ggtcaacatg gtgaaaccct gtnctctact aaaaatacaa
5101 aaattagttg ggtgtggtgg catgtgcctg taatccoagc tgcttgggag gctgaggtga
5161 gagaatcgct tgaactcagg aggtggaggc tgcagtgagc tgagatcaca ccactgcatt
5221 ccagcctggg tgacacagtg agactatgtc taaaaaacaa aaaacaaaaa cgaagcacct
5281 cttgagagag ctttgcatgc agatgtcaca ggcaaaatgc ctcatgttgt ggggaatgtg
5341 gcagtggact tctggggcca ggctgaggcc cccacgtgct gtccccttg ggagcagggc
5401 agggtnggct gggttgacag atgtgcagag aaggagagaa gtgggggcaa tgccttctct
5461 ctgatggtca gctggcggga aaggctccag gggcttctga ggagagaccc taagaggact
5521 ctggatgggc ctcggctggg ggnaggctgg tgctgacctg gcacgtgggc actgtggggg
5581 tgcaatgggg gacagtgtgg gaggtgtcat gggggtctt tacactgggt actaaagagc
5641 ttaggagcct gagctacctg gtgtgggca atcacatttg ctgctgtgtc caggcaagga
5701 ggagcaggtg ggcttggacc ccaaagtgac atgaagtggc caggactgag cgctgggcca
5761 acgtgagccc caggggtgc ttggatttat cagctgaaga agggcctatg gaagggagga
5821 aaacaatcct ccagacagat gagagcactc agtcacatcc acctggacct gacatcacct
5881 cccaggctgt gcaggggcac acacagaact ggaatgggta atgacttatt agagcctcct
5941 tccaacagct gtgggccctg gaacctaaga acccaccttt ggagaacatt tttgggtctg
6001 agagctttga ggccaggcct tgagacaaac ccacccagaa gccctgagct acttttgctg
6061 taagagtagg nagggccctg ccctgctcc aggagccgcc ccttgatccc tggaagagaa
6121 ggaagcactg actgatccag aggggcgatg agtccagagg ctgagatcag ctggaaccgg
```

FIGURE 3 (continued)

```
6181 gccaccagct gagcgtgtga ttcctctggc tccaggccac ctctgagggt ctcccaatgg
6241 ctgggaggga ttagaggact gtggcttctt gggtgaggga gcctctgggt tacagtcacc
6301 gtgccctttg aatctaatct gctctcgaca agaatcagct gacctgatag gcatgctcag
6361 gcaggaggca natggccagg gccaagagaa gcataaggat ggagtagagg agggagcaga
6421 gcagggtcag gtgaaatctc tcactcagga caattgtgca gctgacttgc tgataccttg
6481 gaggagtcac gaagttcagt gtgcccagtt ggggcatctt ccaggctgtg gctccatcac
6541 cctgcagttt tggctcagaa cagccaccac atcctcactg ctctcctggg atgagaaggt
6601 gggtggagaa ccaggggctt ggtgcgtggc cagagctgga gcagcttcag gagccaggtg
6661 aaacctcaga gcctcacagg ctttgaacaa agtgcaggag tcccagccct gccatttatg
6721 gcgggttcct ggcggtgatc agtcattatc agcagtatgt tcactctgct gatatcaccc
6781 aaggccatga tcatccctta ccccaggcct tgcacacttg cttccctgtc cnnnnntaga
6841 cagctgggnn nngctgttcc tgctcttcgc tgcccctggc actcacagag cagctgactg
6901 actgacctac caacttaggg agaaaagtgg ggaggtgggg atggaggaca ctctggggat
6961 acagcctctt cgtgatttcc ttcctggagg ggagaggcgg ccagggcaat gcaatgctgg
7021 ggctgcagtg cctccgctca gccacagcac tggctgcagg gcaaaccctc aggaccagat
7081 gaggggagct cagcctgatg tccaggttcg ctggcatgtg agggacgtgg tcaggcacag
7141 ctatagccat gggtctatgg acggttcctg gatcccagga attgctggtg gggtccctga
7201 tacacacctc acgtcttcaa cctctgccct ctctgatggc ctgttggcac tcctcctgcc
7261 tatctctgca cactcagcga ctttcccctt tgatggggac aggagtggag gagggcaggg
7321 caggatggag acaccataca cattcctgct cagtgccttt gccctccctc ttccatccat
7381 gggagtcacc tcccctagac cttcantgtg gcctgcgccc ccacttctcc ctcccagagc
7441 cttcctagtg cccccaacaa gtgcctgccc tcgcctgacg ccctgtttgt ccccttctgc
7501 ctcttcttca tgctgcttgt taggttgaaa cataacatct gtgtttcaaa acacatgcag
7561 tcaggtttct gtgcatgtgt gtatgtagat atagattgtg gtgcaatctc agctcactgc
7621 aacctcctcc tcttgggttc aagcaattct cgtgcttcag cctctcgagt agctaggact
7681 acaggcatgc accaccacgc ctggctaatt tttgtttttc tttttgtatt tttttagtg
7741 gangatgggt ttcgccantg ttggccaggc tggtctggaa ctcctggcct caagtgatca
7801 gcctgccttg gcttgccaaa gttctgggat tacaggtgtg agccaccgca cccagacgtt
7861 agtttacttt ttaattccct gtctacccac ttcttgtaag ttacatgaaa gcagacacct
7921 tgtgtgtctg atctgttact gtctctccag ggcctaggat aagcaggtgc cagtaagcct
7981 ttgttggaag aaaggaagga gagaaaatgg acctcctctg gatgggatcc ttggctcctg
8041 cgtgctgatg tgcagcctgt gacccgggct ctgcactgct cctctggctc caggcaatca
8101 tcatggaaag ggcggcctcc ccagagggct gcctgggaat gaactgggca tctggggaag
8161 cccattncct ttggctgcct cttgcctgtg gcgcccaggg ctgccgtgcc acctcctttg
8221 tgaagctggt ccccagccct gcttatcagc cccatgtccc attcccttgg gcccagcaga
8281 ggtaaaagtg gctaagtggc ttaactgggc caggtgcagt ggctcacgcc ggtaatccca
8341 gcactttggg aggccaaggc gggtggatca cctgaggtcg ggagttcgag accagcctga
8401 ccaacatgga gaaacccgt ctctactaaa aatacaaaat tagccaggcg tggtggtgca
8461 ttcctgtaat cccagctact tgggaggctg aggcaggagg atcacttgaa ccacggaggc
8521 ggcggttgca gtgagctgtc attgcactcc agcctggaca aggagagcga aactccgtct
8581 taaaaaaaaa aaaaaggtgg cttaactgtc ctctctgtca tggcctctcc ctccctcttg
8641 ccccagtggt atttggctct tttgtctgtc ttgtttttcc cagactgacc agccttgggg
8701 ttaaccaggg gcagggtgac aactcacagg caatgacgtc cctcagcctc cttcccccca
8761 cactccagag gctgcaggtg actcagggtc ttcgtcggtg gctccggaag ccttgcaggt
8821 gccctgccac atggccgctg tgctgctggc tgctctgacg ggtcctgccg gggctactgc
8881 tttcctgtcc cctccccga agctgggaga tggattcct ccctgagtga ttaattggtc
8941 tattttaagc tcatcaaagt agcctcgtac tttcaagttc ctcagggagc aggcccggaa
9001 gatgatacct gcggacttaa ggctgctcca ctgcaggata tggggtcggg ggctgtgtct
9061 gtcaattgtg aggtccctca gggcaggccc cctcctgagc tggacagggc ttggctcctg
9121 agtgctgatt ctgcaggctg tggctcagtt ctgcactatt actctggctc cggcaaatcc
9181 tcatgaaaat aagcctggga ccccgaggg ttgcaggtta gccccctaca gccttccctt
9241 gcatcatcct tgctcctcta accagggaca ctcctgcctc ctccctgact atctctgccg
```

# FIGURE 3 (continued)

```
 9301 ggttaacacc tgagcatctt ctggctcgat aattctgtca tgacccaata cgccttccct
 9361 gaccctcaca tctgggttga gggccttcct atgccctgta cctaatcctg gttttccctc
 9421 tgtaaggtgg tcagagatgg gcttgggcag agtagtttca aaggctctcc ccaaatctct
 9481 gtgcagctcc cctgactgaa ggcctgtgag aacagggtgg tgcctgtctt gttcactgtt
 9541 ccccaatacc tcacctagtg cctggcacag agaaggtaca aaaataaaac tttcccaaga
 9601 atgaatggtg tgcatttgaa tcttatagtg tctgaggact ggggaaccat ctcttatccc
 9661 tttgtatcct ctgctgccca aggtcagggc ctctgcctga agtccctact gaatgagggt
 9721 taactggttc agagatgagg gaggaagcca ttgctgggag gggctagaan ctgggcccct
 9781 gcccttccca cacccgagca agagcagtag gattgtcaga tgaaacacag gacatctgct
 9841 cacatgtgag gaatacatct ttttttttaag acagattctc tctctgtcac cccaggnctg
 9901 gangtgcagt ggcatgatct tggctcattt caacctctac ctcttgggtt catgccattc
 9961 tcctgtcgta gcctccccag tagctgggat tacaggcatc caccaccatg cctggctaat
10021 tgttgtgttt ttagtagaga caggggtttg cctcattggc aggctggtct tggactcctg
10081 acctcaagtg atccgctcac ctcagcctcc caanagtgct gggattacag gcatgagcca
10141 tggcacccag ctggaataca tctttagtat actgcatgta atatttggga catgctcatg
10201 ctgaaaaaac taactgaatt tgaatttttt tttggttttc ttttttgag atggagtctc
10261 actccattgc ccaggctgga gtgcagtggc acaatcttgg ctcactgcaa cctccgcctc
10321 ctgggttcaa gcaattctcc tgtctcagcc tcccaagtag ctgggattac aggtgcctgc
10381 caccttgccc agctaatttt tgtatttta gtagagacgg ggtttcacct tgttggtcag
10441 gctggtctcg aactcttgac ctcaggtgat ccacccacct cggcatccca aagtgctggg
10501 attacaggtg tgagccaccg cacccggcct gaatttgaat ttaactggga agcctttttt
10561 tattttttcc tcttctttct gaatctggta accctagcaa gggagaagtg actagccagg
10621 tgccaggtgg gtctacggcc tgagtctcca gctctctatt cacattctgc ctgcttcctt
10681 gatgcttcct cctccttaaa tgctttctgt cagagaccag ggggcactct aggcctggct
10741 gcccagcacg cggaatccag gagcactcct acctcctaat ccctgcccca gctgccctct
10801 ggatggtcag ggaaggcctg aggaggtgat gtttgagctg agatttgaga gaatgtgacc
10861 agagatgatc caggaaagaa cattccatgg agaggtggga gtgaacttgg tgcatctgaa
10921 aacagaaagg ctagcgtggt tctgcgatgt gggaagggag tggaaacatg gaaacacagt
10981 cagcatttcc tttttttttt tttttttttt ttgagacgga gttttgctct tgttgtccag
11041 gctggagtgt aatggcgcgg tcttggctca ccacaacctc tgcctcctgg gttcaagtga
11101 ttctcttgcc tcagcctccg gagtagctgg gattacaggc atgtgccacc ccgccggct
11161 aattttgtat ttttagtaga gatggggttt ctccacgttg gtcaggctgg tctctagctc
11221 ccgatctcag gtgatccgcc cgcctcggcc tcccaaagtg ctgggattac aggcgttagc
11281 acnaactcag gaggccctgg aactcatctt gtgccactca agaaagggca ggaggggtcc
11341 tctcctttcc cacctttccc aagctgaagg actgcacact tctcaggctt ccaaggcagg
11401 agcttcggca gcaggaacag ggttgcaagg tagttagtct gggtgtctgt cgtcctgggt
11461 tgggacatct gggagctggg gcaaggcctc tgggccctag tgccagagag cagtttggtg
11521 gcgttgcctg ttctttaaaa tgggttaggt gtagccatga gccccccat gcagcgggtg
11581 tgcaggcctc tccctcagtc agaacaccct cacccacccc tccccacttg aagcaggccc
11641 ttgagaacac tgctggcagg gaggcggctg ctcttcctcc taagggaaaa gcctgcagcc
11701 ccgtgctgct gggccgtggg gtgaggggga agccaaaggg ccctatcac ccctcagcag
11761 gagtctctcc tggctttgga aggggctgaa ggcccgggng ctctcacgag ggaactcagc
11821 cctgctcagc cggtcaggac tcctcctcca cgtctaaatc cacagaccaa acaaaggaca
11881 tggctcagtt ccaccttcaa tccacaggga ttctgcctgt tagcacgcta aggaaactgt
11941 ttcttacttt aaattatcca ttaatttcct ccaactgaaa gatactctac aaattttctg
12001 ttgttggagg gtttaagctt ggtccctctg aggggtggg ccctgctgtg tcggcccctt
12061 gtgtctgctc gtggaaggtg tgccatgtgc caccgtgtgc catatgcagc tgacacgcct
12121 gtgcgtctcg cctggcgctg gagactgctc tctgtgtact aagcgagtac tggatcccca
12181 gggcctatct tgcccactgc ctgtggcaat nacacaggca atacacaaag cgcattcaag
12241 taagcaggtc tccctgcccc ccggcctccc agaacctcgg tgcctggagg gcaggntggg
12301 ggnagggcgt tcctgaatgg aggccggttt ccctctgcgg ggaggaaacc ccatttccct
12361 cctacccta ggcgcttgct acatctggcc cggcatcaga caggaaagaa cccttctc
```

FIGURE 3 (continued)

```
12421 ccagcttgta ggaagtctga gctgggcccc ttatctaccc acagcacttc ctggaccggg
12481 ggcctggacc gggctccgaa gggnctggnc tcccggtctt ggtcttggcc tcggcgccct
12541 cgtttctctg cgctttgggc aggggaagct gcggacggca agctctcggc tttcgtgaga
12601 gcctggtgga atcggtgttc cccgaaggct actctgcggg ggcgggggct agntccgggc
12661 cttcccggca gtatcgtcnt cccccgtggg ggctggggna nggtngcccc cagggctnnc
12721 ccggagcggc ggcgtggcca aggcccgaac cgggtctgac atctagtggc ctcctgggcc
12781 cgggcagggc gagggncggg gcaggaaga aggtggaggg cagaatggga ggcgtggagc
12841 gagaaaatca ggaagcgcgg gaccaagccg gggaagggcg gcgggtctcg cccctggcac
12901 ccgctctcct cggggcccgt cccatccccc aggcctggcc gaccccaggt ccttccgtgc
12961 gcagtcgggg ctcgcaagga cgaatcccgc ggccctcgag gcaggcccgg gggagctccc
13021 ggccctccac ccccgcaggc cgcagatccc acgcaccccc gatcatgggg gccccggagg
13081 gaggtcgcga ggccgggctc acggtggccg cggttcgccc acgtgcgggc ccggagctgg
13141 cagggcccgg tcccgagcgt ggccgcaacc gcggggacct ggcacgtgcg gggcagcccc
13201 ggggccgcg tacgccactt ccggtcccgg agacaccgcc cagcccgccg cccggttgcc
13261 atggcgacgc cgtcgcgcca cggccgcag aaccggccaa gcgacccggg cgcggcgcgg
13321 ggaggctgaa gggacgctcg ggtaggcaag gtaggaggcc gggctggggg tgggagcgga
13381 gcgcgcaggg gtgcggggcg ggggcggccc aggtgagccc tgactgcgca gggagggaca
13441 gcgcggggct cccgagtagc agccggcctc gcacctgccc cttgcggccg cgcactggac
13501 tgcggcgccg acccgcaccc tgggcccgag ggctgcaggc tcgcccgccc tctcggagcc
13561 gagcctctcc cggtccaggc ggcccctgcc ctggcctgcc cgggtgccgg gtctctgctg
13621 aagttagaac cgagaccccc gcttgctggt gaccccgagt ttggatcttt gctcctgcgc
13681 cgcgttctag agcaaggtag ggtgcaaatg gaccaaccag cctttgccac ggctgccctc
13741 ttgaaatctg aaaccggagc caccgcctct tgccccgagc agggcccggg ctgcaacgtg
13801 gagccgcagg tccccgcctg tgtctcccga cgcccccagc ttctgagcgc gagggtggga
13861 gtttcccgag tgggaaagcc ccatggcttc ggtggcctcg gtggccctgt ggtgggtcag
13921 gccggtgcca actgcgctga gggcggactg ccgccacctt gacacctggg agatggcagg
13981 gccaccctcc ctccctccct ccctgccctg tccccgactg tatcacggag cgaggatcat
14041 ccgtgtggat ctggggtccc cttcccagac ttctcctttc tggtcgtcct cctctcattc
14101 attccacctt ggcagccttt gtggattttc tgactccgta aatgaagtta catctagggc
14161 gcctagattc tgcccctttg gtttaatagc taatgaaaaa aaaaaaaaa aagctttgcc
14221 acctcctcta ggtgcctgga tttctcccgg tgaaatttga tggaggcagg aaaatacgag
14281 gcggtggcag ccccacctcc ttgcatgagg gagcctccta gagctggagg tggaaccacc
14341 ctgcttgtcc cactcctttt ctttcttgct ttattgcttt cttgctttcc ttactttcct
14401 tccttctttt tttttgaga tggagtcttg ctctgttgcc aggaggctgg agtgcagagg
14461 gcaatatcag ctcactgcaa cctccatctt ccgggttcaa gcgattctcc tgttccagcc
14521 tccctagtag ctgggattac aggtgtgtgc cacaacacgc agctaatttt tgcattttta
14581 ggagagacgg ggtttcacca tgttggccag gctggtctcg aactcctaac ctcaagtgat
14641 ctgcccgcct ggcatccca aagtgctagg attacagacg tgagccaccg tgcccagcct
14701 tgtcctacta cttttctgcc ctcaccactt ttccttggca ggcagagctt gggctcctgc
14761 taatactggg atggttcagt ggcattagat ggcattggtg gaggggaatg agaaattaac
14821 cccctctgaa agcgtagctt cactgggaaa aagcactcta ctgtctgaac aattcataaa
14881 tgaattttgg gaatatacaa tgtcacagat aaaagcaga ccatcctgtg ttcttccagc
14941 cccaggagct tctgcttggt gtgcaggggc taatggtgga cagcaatgga gtgtagattt
15001 attagagacg gctgccatct ggctctctgt ggccccaaac ctcatgtgtc agcagtgtga
15061 ctctttctaa ggtgctctta ggaccagatt tcgttttgt aagattggtc tttgatggaa
15121 tgcctacttt gtggcaggca ctgtgctggg cgctggcaca cctttatcca cttactcctt
15181 ctgtgttcaa taaggtagct ccagatatcc tccactttat agattaggaa gcaggcttgg
15241 agaagggact tggcttgtcc aggagctgat ggttataaat aatgagtctg ttttgaaatc
15301 acatctctct aacctgggct gcgctgggcc tttcatgggc cgttggccct ctggccttca
15361 cgggccccgt cttccataaa aaaaataata acaattggcc cggcgcagtg gtgaaagcgc
15421 gtctctacaa aagatacaaa aaattagcca ggcatcgtgg agcacgcctg taatcccaga
15481 ctcggggagt ctgaggcagg agaattgctt ggacccggaa ggcagaggtt gcggtgaccc
```

FIGURE 3 (continued)

```
15541 gagatcttgc cattgcactc cagcctcaaa aaaaaaaaaa ttaataaaaa ttatatttta
15601 caactgcatt ggtataaata caagtatagt ccagactgga ttacaattaa ttttaaaaac
15661 aaaacatttt agggctggct catgtctgtc tgtaatccca gagctttggg aggctggggc
15721 aggaggactg cttgagacca ggagtttgag actagcctgc acaacatagt gagaccctat
15781 ctctccaaaa aaagaaaaaa ttaactgggc atttcagcat agctgtagtt ccagctactt
15841 gagaggctga ggtgggagga tccctcgagc ccaggagttc gaggctgctg tgagctatga
15901 tcatgccatc gtattccagc ctgggtgaca gaggtagaca ctgttaacaa caacaacaaa
15961 aaaattaatt aaaataagtt ttaaaaaatt gcaacatttt cctcaaccct aaatgttcat
16021 ttttttcttc tgattttcat ggaaatggaa acattttggt ttgtaagcat tgggagccct
16081 ctgtcttgtg ggagaaagga gctcagtgtt tgacttcagg ctctgctgct cctgggtac
16141 ctagttcctt ggtacctggt ccaagcagcc tggatacccc gggtccctgg gctgcctggg
16201 ccaggacagc cgccctagga taaatggaaa tgcagcccct gcggcttgtt caccctcctg
16261 taatgccttc tctcttaccc tttggtcagg gcctggtgtc tctgcatgca ccagggctta
16321 gtgccatgct ggtacaagcg tggggaggat gcaggaggac tggcatggga tggggagcac
16381 tgcctgggaa gccccttctt cctggggcta ctggggtgct aagaaagtac cctaatagct
16441 cacaccacac tttgctttct ccttcatcac atgctaggac gctctagggc aattgagctg
16501 ttttcccctt cacccatcaa gaagagatat cggcctttcc gcagtcacag tctttcctaa
16561 ctcaattcaa actctgctgt tgataaggag ggctgtagcc agcccaggct gcccgcttcc
16621 cagcctcccc tgctccgcct tccgcccccg aggctgtgca ccatgtgcag tgtctggtcc
16681 ccaataatga gattagtctt ggttgccttt taataaaacg cagtgggcac cgggagggag
16741 agcgatgctt ggctcagtga agatctgcgg gtcatgctgt ccctaatgcg ctgattgcat
16801 taagtggatt ctggctgcag gtagggtgag tgggtgggga cgagggtgac tctcacagct
16861 ctaagatcca gaaactgcca gagatctgtc accctcatcc tgagctgtca cagaggaagg
16921 caagtgactg tgtgaggggc tacgtgagct ccctctggtt gcaaggttct ggtctgcagg
16981 gcagtggagc ccttgggggt ggggagtggc agcttccagg ccttgaagct gctgcccaca
17041 gttctgctct gagaacacag agggcccaag aacagccggt gtcccagggc tgcccagtga
17101 ggagggaaga gcgagagagt attcttgctg tcaagactgg gaaatgaggg ccacgattca
17161 aagccttgct tcctagggag aaatctcacc caatgtccag gtttgcaaat gcagcagaca
17221 catttgtggg tgggtcagat tctgtccaga gataccagaa tgtctatccc tgtacacccc
17281 cacctctggc atgggacagc ccttccctgc acacaaatgg gttatcaatt atgtccaatg
17341 aatggcctca cgagagtcct gttgcggaag ggatcttccg cttatctcct gtaaagcaca
17401 gagccacgct cagaacctac ggactgtggt cgcctgcagg ccagccatgg gctttccttt
17461 catccttaca cttagatttt gaagcctcgc ctttgaatca gaagcaggct gctgtcattc
17521 cagaggccgc tgttcatctc tggcttcctc ccagatgccc aggtgctccg ggtgcctggg
17581 ctgcctaggc cagggcaccc gccttaggag caaatggaaa tgcatcttcc tcggcttgtt
17641 tgccctcctg taaccccttc cctcttgcct tcggtcaggg cctgctgtct tgcacgcacc
17701 agtgcttagt gccatggtgg aaccgaggcg gggaggacgc aggaggactg gcacaggagg
17761 gggggcaccg cccgggagct tcccctgcgt caaagcagct tcctcagtga gctccaacac
17821 agacccttgc tggcctcagt ctctggaaag actgacagca ccaccctagt tcctgggcct
17881 tggaaaggcc aaagccacga gcaggcagcc actgttcggc aggagagcta gagatgctat
17941 tgcccacaga catcaaagca ggggtgccgt cttccgtgtg catgctggga cgggtcttgg
18001 aggcccagat tagctcctgg cttgaacttg taccaccctt acctgaaaat tgggtctgta
18061 ccaaagctca tctgcacgcc cctttagggc agggaccagg ccccctctgt gtggccctag
18121 cacctggcca agtgcaggtg gctgcgggtt gagttgagct gctatttgct gatgggaatt
18181 tgggggcctg tcgcttgtcc tctttgagcc tccatttcct ggcctgtcaa attggggcaa
18241 tgctcctgtt atccacacag tgtcatttaa gggtgacatt agagatggca tgaagtgccc
18301 agcacagagc aggtgctcac aggctgttgg gtccccaccc tactgacaca ccaagcacac
18361 gtctgccctg ccatggtggg gagcaaacaa tgttatggtt ccgactcccc gggaggccag
18421 gccgggcatt tcactgtagg atgttgaagc cgcaggcagt cgtcgctgcg agaagagagc
18481 ctggctctga tgtccactgt cttccaggga gcctggtggg aaggaaggag tgggcagcgg
18541 cccctcgctc tgcgggcctc tcctgccctt tgtactccac gaggtgtgag gaagttgccg
18601 ggtcacccag cagagggaga ggtgatgtcc cctctgttct tcctaatttg tagctaatca
```

FIGURE 3 (continued)

```
18661 gattctgcct gcagccaggc tctctgggga tgaatctaat aaaggaggcg gcgacctgga
18721 gaggaggaca dacaacaagt gaccaggggg gacagcactt ctttcagtac attttcctgt
18781 tagactcggg gtattagaga cccaaagata cccaaggagg agtgagagcg tccctgcctt
18841 cgaggagcag acagggcacc gcgagggtaa ggaggctccg ggagagcctg gggacagagt
18901 gatctgccac cgcggtgcct gaggagtgga ggcaggggtg tgggcccaca gcagggagcc
18961 aggctgggcc atgtccttgg attctgtgag cccaggcgtc tcctctagag ggcctagcag
19021 gaacagtggg ggctgcagat ggaaacgggc aggatcatgc catgcagttg gcatttcact
19081 ggcactcggg ggcacttacg caggggacag catgatgttg ggagctggct ttgtccctgg
19141 catgtctgtc acgttgaaga gggagaagct gcaggccctg acttgggtgg ggcagtgagg
19201 atgctcagga gggaagtgag gggaggggtg ccagcatgcg gcggcctggg cagccttctg
19261 tggaggagct gaggtgtcac ctgggcccgg aagaagggca gccctgctag ctagtgggga
19321 gggcatgaga gaacttggcg acgatgggag agaaggtgac ttgggacgag ctgggtttga
19381 agcgtctgtg ggatgtccag gtagagatga gtagtgaacc gtcagaaatg gggcttgaat
19441 ttggggtggc ggggacagaa ctgatacccg tgtaggtgac agataaggac agaggcagga
19501 gttccaaaaa taggatttat tgttggctgg ggcttctgga atcccgtatt cccgtccacc
19561 ctgggaatgt ggattggagc tatgtttctg ggagatgatt tgatggaatg tgtcagaagt
19621 ctaaaacaga acctagccct tgtttcagga ttccctgcag agaagtttgc agatgaccac
19681 atcctgttgt ttatttggtg gaaaactgaa atcgaaagct agctaaatgc tgaacaatgg
19741 gaactagttg gctaaaaaat ggccgtgcaa tgcaagagtg tgaggttacg aaaatgatga
19801 tgtgggcgcg tatccattga cacaaacatc catgtgtgct acgccctcag ttaaaaagca
19861 ggttagaaaa tggaataaat gatcctgctt ctataaaagg atgcatatgt gttttaggaa
19921 gaaggtgtgt gaggatatag atcaaattct gatggcctgt cattttacct tttttgctga
19981 tccatattct actgcagtgc gtgtggatta ttagcacaca cacacaccct tttttttta
20041 attaaaaaaa attttttttg agacagagtc tcattctgtc acccaggctg gaatgcagtg
20101 gtgcgatctt ggcccactgc aaactctgcc tcctgagctc aagggattct agtgcctcag
20161 cctcccaagt agctgggatt acaggtgtga gccaccatgc ccggctaatt tttatatttt
20221 tagtagagat agggtttcac catgttgtgg ctggtcttga actcctggcc tcaggtgatc
20281 cactcgcctt ggcctcccca ggtgctggga ttataggtgt gagccatcgc acccggccca
20341 cacacacacc cccctttaa tggtggagtt gccaacagtt gtccgatgtg gcagagagaa
20401 ctggggagca gagaaggagc ccatcactgg gagggactga aaaccagctc ctgggcactg
20461 cagggcagag cgtgtgccgg gtgtgaaggg ggtcagtgcc cctgtgctgg ccactgtccc
20521 cctagttctg atacagttgc tgccaggaga ggctggaccg tggcaagggg ccagtgggga
20581 accgggggcgg gatggggggc agcagcagtg ctctggggtc tgcttgtggt ggccatggtg
20641 gtggcagttg cagtggcaac tgtgggccat ggcagcactt ttccgttgcg cacaggccgc
20701 tgccgggtga ggggagagcc ccgcttgttc tcctcctgcc gcctctcctc ccatccccag
20761 ctgctgggtg ctctccggcc ggcatgaagc tgtgcaggca ctgggcactc ccttgggctc
20821 ttagcggggc cttctcattg ctgcttcgct aggaaccacc cgctctcctt tcctcctgga
20881 gggccacgtg gggcgagcac ctgggacagc cgtgctgagc tctacccggc cccttcgcag
20941 gcctcgtttc tgggggcctt cagttttgga aacctccctg agggcccctc tagagtgcgg
21001 gtccgccccg cccctggtgt ggaggggaag tgccctgtcc ctgtgtgctg acaggtccct
21061 gtgtgcagca tggtcggggc acttctactc tgcaggcgcg gccgggcggg gagcggggtg
21121 ggggcgggc ggggcgtgg gggagcggg gctggctctc ctgggtgtgg ggtggggagg
21181 cctcctcatc gccagcatgg agttaaaaac caggatgggg gagggagact tcccatttct
21241 cccgagatgt acttcatgac gcgtctggag aaaggtgtg accagcccct tccttcccgt
21301 caaggagcgc gcttgcctgt gtaactcacc tgtaaagccc acccagggaa ggccagggcc
21361 tcatgaaaca gaaaacaaag ccgggcactg ggccttgag ctcactagaa tttggggtat
21421 cttttccttgc accctcaccg catatggaac tcctggcgtc gtgtcccagg tcacgcctgt
21481 ccccgtgggg aggctgggcc cctcccccca gccactcccg agacttgaya cctctgcctc
21541 aggacgatgg gtgggaaggg gcttgcgggt aggagagcga gcgctgcttc cagcgggagc
21601 ctcgggggag ggtggcgggg ccgccgtggg aggagccgcg ccgcatctca ggcgcagtct
21661 ctagggctg tgcgcatccg tggggggggac atgcgcatct caggggggct gctcgcatct
21721 gggggtgctg tgtgcatctc gggggggctg tgcccatcta gcggggtggc tgtgcgcatc
```

FIGURE 3 (continued)

```
21781 tggaggggggc tgtgcgcaac ccggggggggg tgttgcgcgc atctagcagg ggcggctgtg
21841 cgcatttcgg gggggggctgt gcatatctgg ggggaccgtg cttatctccg ggggcggctg
21901 tgcgcatctt gagggggtgtg tacatctcgg ggggcctgtg cgcatcttgg ggggctgtgt
21961 gcatccgcgg gggctgtgcg catctcgggg tgctgtgcgc tgctcctctg agctctgctc
22021 tttcttgcag cgtttgcctc agcatggagg gcggggccgc ggcagccacc cccacagcac
22081 tgccttacta cgtggccttc tcccagctgc tgggcctgac cttggtggcc atgaccggcg
22141 cgtggctcgg gctgtaccga ggcggcattg cctgggagag cgacctgcag ttcaacgcgc
22201 accccctctg catggtcata ggcctgatct tcctgcaggg aaatggtgag tcccatgggc
22261 cgctcctctt ttcccgggct tgtgggggtc cctgagaggc agtttgcagg ggtcttgtca
22321 cccctgcggt ctcttctggt tggacaaatc taagattcta gaaaagacag agacagaagc
22381 tggttcagag cctggggaga tggaatccaa acccaggctc tgaggttggt gagtggcagc
22441 tcctctccag cctggtccag cattttcacc tcgtttccac acacagcatc caaggcgggc
22501 acttcttgca gcagagggaa aggaatgagg ctccgagcca ggccctgctg caggggtggt
22561 ttgaattgag ggaaaaaaag taatcatatg tgagagtttg tatgcgtgcg tgcgtgcgcg
22621 cgcatgtgtg ttgttggtct tggacttggc agagctagag cgcctcccc tggggcagga
22681 gcaaggcagt gcttggcctc cacctgcctc caggccaggg atccaggaag cgggatctgc
22741 atccggttga cccgctcttc ctagaggtgg tcctggtgac agccattcct gagcagcaga
22801 aagctaagag gcattcctca cgtgacctgg ccttgcccac ctcttctgga cgcgggagat
22861 caggctggga tcacaaggtt ctgcttggga gccaggcgcc tgcttgctag gagtaggacc
22921 atctgcccag gcttaggtgg gggcctgtgt gaggagccac gtggctaaca ggtgaactca
22981 gaggctgctt gttgcctcag tgtgaccaac agtggacctc aaacacagcc tggaatttgc
23041 aggacacctg acaagaaggt gggtggaggg gggcgtctgc tgggccgggc agctccttta
23101 ggtggggacg agggcagagg cgctgccttc actgcctgtc ctggtggtgg ggactgtggt
23161 gcagcctccg gccctgccct ctttgtgcac agctgggggga ggttggaggg tgggggaggg
23221 gtgttaaggt gcacacagcc ctaggtgccc tcagagaagg ccaggagctg cccagggtcc
23281 ccagggaacc tggctttctc ctccggttcc tgcagctagg ctcctgttac aagccgtcag
23341 ctcacatcac ctctccacca aggtgcctcc ttgctgctgg ggcaggaggc ctcacgcaca
23401 ggcggatgca ctcacgttcc ctctctcacc tcccacagcc ctgctggttt accgtgtctt
23461 caggaacgaa gctaaacgca ccaccaaggt cctgcacggg ctgctgcaca tctttgcgct
23521 cgtcatcgcc ctggttggtg agttcccggg cgcggccttc cccgccacct gcctgcctct
23581 tcaggtatgg caaacagccg cttcacctgc tctgttccct ccccagagct gtgatgggcc
23641 cgcccccacc ccaaacatcc cctgcagggc cactaggtgc tggcagccct cgagctggga
23701 ctaaagccca gaagtcccgc tagctggttc ccctgggtca tcttacacct tccttttcca
23761 catccaaccc tgtcctcata tgacctgtct ctggcccagg cttggtggcg gtgttcgact
23821 accacaggaa gaagggctac gctgacctgt acagcctaca cagctggtgc gggatccttg
23881 tctttgtcct gtactttgtg caggtgagtc cttccaacac cccgggcctg gggccaccta
23941 ccagggaggt gggaggagga ggggagctgg gctgaaatgt acctcatgga agggcctgat
24001 ttctggggtg tgtgcaggtg agagagctgc cttccaggc ctgtgcgggt gcaaagctag
24061 gattggcggc caagggtgcc cagctcccag gcgccccatg gctgactcag cacttttggc
24121 cacaagccca gctttctgag tgtgccaagg cctcaagcgt tggggaccg gtcccttgtc
24181 cctaagcgct tagtgctcct cccaccactg tgctgaggag gaaggaaacc aggcagggct
24241 gagggggctca cagtcgccac gtgggcacgt gggtgtgggc ctggccgacc tcggctgctg
24301 gggtgtccgg ccgccctgtc ccggaaccgt ctcctttcaa atcctagtgg ctggtgggct
24361 tcagcttctt cctgttcccc ggagcttcat tctccctgcg gagcgctacc gcccacagca
24421 catcttcttt ggtgctacca tcttcctcct ttccgtgggc accgccctgc tgggcctgaa
24481 ggaggcactg ctgttcaacc tcgggtgagt gtcctgggtg ggagagggca gggcctgggc
24541 caccccttgca cagacctcac cctgccttca gcttccccag ctgtggcttc ctgagccgcc
24601 tctcgtggcg tcacaactgg tggctgtagt tatgcttgct aagatttggg tgcttggggc
24661 ttggctttgg ttagctttct tgatttttacc ctttcaaaga aacttctggg ctatgggcac
24721 cctatttatt cccaccacgc agcaggatct gcaggacaac tgcttagagc tagaatattg
24781 atctaggttt ttacattgcc catctctttt tgtctgtgag ccatagctgg agattgctgg
24841 ttgggggcgg ggggatggtt gttctcttca ggcagggcag ggaggcaggg gctggtgctg
```

FIGURE 3 (continued)

```
24901 gaatccccat ggcatcttta aggcccagga tacaaagggc atttggccta attgtgaccc
24961 cttgggcagc ttctcccttc ctctcacccc tgcaggggca agtatagcgc atttgagccc
25021 gagggtgtcc tggccaacgt gctgggcctg ctgctggcct gcttcggtgg ggcggtgctc
25081 tacatcttga cccgggccga ctggaagcgg ccttcccagg cggaagagca ggccctctcc
25141 atggacttca agacgctgac ggagggagat agccccggct cccagtgatg cgcccggccg
25201 gccctggggg ttcgcggggt gtcttcttgc ctgcccctgc tgaggcgtct tcaggactgc
25261 aggctccgga gagtggctct ggcagcaggc gggcgcgtgg gtgcagctgc atctgtttga
25321 gtgctgcttt ctggggtcag gtctccgcct cctctgcttc tcctttctcc gctgctatag
25381 accagttcat tgtgtgtggc tcccgtgtct ctgttgcccc cttcagtgca gaaggctttg
25441 ggtaggactt cgggtgttcg gtcctggtcg cagagcacag atctttaaag aagcgagaga
25501 ggaggcccca ccctcctggc agcagatgcc tggggcaagg ccaggggaaa ctggggggc
25561 ctcagggaca ggcctggaaa ggccacgatg gctgctgaat tcaaacaagg agtccctcca
25621 gcctgaataa cacgtggcac aaatgggccc ggcctttggc agaggagcaa gtgatatgat
25681 gtgtaaagta tgttggtggt gaaagcaagg ttccccagga gaggggaggg actggcccct
25741 gggaagctct gagatgaggc tgtggcccag ctgtagtcct gaccttcctc ttctttaacc
25801 ctttagccct aggatggctt tggtgggaga ggggatagaa gcccatgact tcagacagac
25861 tttctcttgg cagatgcagg cgggcctcct cccaggctgc tccagacatg ggggttgggg
25921 atgggggca ccttgcagcc ccttcctgct ggggctccct ccttgtagca ccccccttgc
25981 ggctcagctc tggtttcctc tcccaggctc acccaggctc tgctcaggct gggaggcaga
26041 gggcacaaac cttataattt tttaaatgaa aaaccgctgc tgctggctgt ggctagagcc
26101 ccctggggct gctggagctg ctgcctctgt tctggaggac gagccttctc cttatctgct
26161 gcccatcttt ccaggaagtc aggatggagt cagaacaact acagtcatcc cccgtggtgt
26221 ctgcacatca ctccagcccc ataaagagtg tcatgttagc tgagtcacca tttggcttcg
26281 gcctggaaat agtgtgatta gaacactgat cgtgtgcgag gccaggagat caagaccatc
26341 ctgactaaca aacacagtga aaccccgtct ctactaaaaa tacaaaaaaa ttagccaggc
26401 gtggtggtgg cgcctgtag tcccagctac ttgggaggct gaggcaggag aatggtgtga
26461 acccgggaga tggcgcttgc agtgagctga gattgcactc cagcctgggc gacaggctca
26521 aaaaagaaaa aaaaagaac accgatcatg tgcttcttgg atctggtgac tgttctctcc
26581 ctgttttcct ttcttttttgg gtgtttgagg agcatggctt agcttgagac acacacagac
26641 actgtgtact tcagtgaagg gcttaatata cagtttccaa acctgacgac tcttcttctt
26701 gtaatggctg ccctttcct acctgaggcc gtcttagaga aaggggccag tctcctctaa
26761 tgctcagatt tcccatagtt ggcttttgct gtgtctcctg cctcaggcag tgtcatttct
26821 gggagcaggt ggttgtagtc caggccctc cccagcaggg tctgcccagg ctccttcgag
26881 cccctttccc cgcctcctct cagcctgtcc ggatgacagt gttcgcgtcc tgtttagact
26941 gtacactctt caggggtagg ggtgccgtca gttcttcaat cagctggcac acacttgtat
27001 agtgaaatgt ttacatgtgg gaaaactccg ccttagacaa actaccaaag tacaatcgtg
27061 tctctctcta gccggaatgc tacagagaga aatggaacct tagatttgca acaaaagtct
27121 gtaaactggt ctgtttgcca aagtgaacac tggatgacta aggagctgaa gaaggccccc
27181 agaagcggat ttgtggtggg ttattttatt ttgcctgtgg ccaatcttct gtgaaataca
27241 atgtgctgtt ggtgcaacag atgattcaat aaatgtctac agcagacctc tcgcctgtta
27301 tcttccttta ctgtggtaat aaaaggagcc ggagctttta gcagccagac acatgacgtt
27361 agctctaggc ctgagagaaa ttgaatatcc gcaggctggg cacagaaggt aaagcgatta
27421 gtgatattga tcatggccta ggggctgaaa aggcccagcg gttgtccagt ctcgacccag
27481 cagaggcagt gttgtttcca catggttaga taagcccttt cctctcagcc tgagagggtg
27541 gcctggatgg tggagctgca agagcctgat aagagccttg caaggaagg tcccccagtg
27601 tttaatggac cccttttccct ttgaaatcag tcttttgat ccttaagaag aggagcaaag
27661 cttttggaac gagctgagat tccactttag atccacgtac gtggctcagg cagaaggtga
27721 gttttttggca aatttgggtg ggatcgtact gtgcgctttg tgccttgtca cttaaagcag
27781 tggccgccaa cctttttggc agcaggaaca ggttttgtgg aagacaattt ttccacagac
27841 cagggctggg ggtgggggat agttttggga tgattcaagc acgttacatt tattatgcat
27901 ttttatatta ttacattgta acatataatg aaataattat acaacttacc ataatgtaga
27961 atcaatggga gccctgagct tgttttcctg aaactagaca gtctcatctg ggggtgatgg
```

FIGURE 3 (continued)

```
28021 gagacagtga cagatcattc gattctccta aggagcatgc aacctagatc cctcgcatgc
28081 gtagttcata attaataggg tctgcactcc tatgagaatc taatgctgca gctgatctga
28141 caggaggcgg agctcaggtg gtcatgctca cccgctgctg ctcacctcct actgtgcagc
28201 caggttctaa cagccacaga cccatactgg tctgtggccc tggggctggg gacctctgac
28261 ttacttaaag caatttaaaa actcaccaga gctcactatt taaagggacc caacagcaaa
28321 tcctctaata aggtaacagg agtccctgct tccccgcgtt ggtctcaact ttgtcttctg
28381 cattgtagct ggtctctaac gtgtaggagc cagaacggag aggtctttcc ttagggcacc
28441 tgtagagtcc ctcctgaatc aaggcttcca tgtggacctt tattttatt ttattttttt
28501 gagacggagt ttcgctcttg ttgcccaggc tggagtgcaa tggcgcaatc tcagctcact
28561 gcaacctccg cctcctgggt tcaagcgatt ctcctgcctc agcctcctga gtagctggga
28621 ttacaggcat gcgccaccac actcagctaa ttttgtattt ttagtagaga tgatggggtt
28681 tctccatgtt ggtcaggctg gtcttgaact ccctacctca ggtgatccac ccgccttggc
28741 ctcccaaagt gctgggatta caggtgtgag ccaccacgcc cagctgagtg tggacctTta
28801 tttactgaaa agcattcaaa gcacaaggct tgatacatgt cacaaactgg ttcctcagtc
28861 agcatctcat ttctgttttt tttttttttt ttttttttt tgcaccagcc tctgaatctt
28921 atgggtctct gtgaatattg aagtgatccc agtcaccaag ggatgatgcc tccctctcca
28981 gccagccact tcacctcttc ctctacgaat ctctggctgg ataatagcag ggacctcatt
29041 ttcttactgg ggtcccaaag cgactcctct tgactgtggc atagagttat ttctccaaac
29101 aagcacgcgg catttcccaa gccatcctcc tggacccagc gcctgcactc cgtgggggcgc
29161 cattcgggtt gcttgctctt ttcagaccat cccttctgag agaggaggca gcgtggtgga
29221 gggaagagct gtcagtgtgg ctgattcaga ggcctacctg tgcctctgtg accctgagca
29281 acttcagctc tcaggatctg cttctgcatt tgttttggag acagcagtgt cgtctgtcga
29341 ggtgtgagga atacattagg gaacacatgt gaagtcccta tcacagtgtc tgggacacaa
29401 tggacctccc aagaggatgg cctgttagaa tggactctga gcaccttctc ttctatgtgg
29461 gccctctctt catcacaggg ccttccagac atgatacctg ttatcagtgc cccatcttat
29521 tcctgagaat ggaataactc agctgccaag actccaagct cctccaactt gtttttaaag
29581 ctgaaagagg gtgactccat tccccgctgg ttcgcctacc cattcccagc cgaccgcagg
29641 ggagtttggc caccatgtgc acgtgcgtac tgtgtctgcc tgcagttacc aaaaggtacc
29701 catgagcaga tatccagggg aagaaagtct gacttactta gtgcttcgga ggatctacac
29761 agacttctgc tgagtttgct gtttgcttct actctgagta gcttttatt aaggttgagg
29821 gtaaattctt tttaagaagt attaatattt taaatgaatc actccttttc ctttcctcca
29881 atgtcccagg acttcttaaa aagctggggg tttggccagg tgtggtggct catgcctgta
29941 atcccagcac tttaagaggc caaggcggga ggacagcttg aggccaggag ttcaagacca
30001 gcctgggcaa cataacaaga ctccatctct gcaaacaaa acaaaagtta gcaggcgtg
30061 gtggcatgca ctgtggtccc aggtacttgg gaggcbgagg tgggtgggtc acttgagctc
30121 aggaggttga ggctgcagtg agctatgatc acaccactgc actccagcct gggtgacaga
30181 gtgagactcc atctaaaaac aaaacaaaac atctaggtcg ggcacagtgc ttatgcctgt
30241 aattccagca ctttgggagg ctgnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
30301 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
30361 nnnataaaaa taaaataaaa taaaaataat tattatgcac aaagtagtag agtaagagca
30421 gtaatgagtc caggaagtgt tgttaccatc tataaccctt cttcatctga cacaaagtag
30481 agatcgctga aacctagcag aatgaaaacc atccctaaag acaatgaatt agaaagttct
30541 ggccaggcac ggtgcctcat gcctgtaacc ccagcacttt ggaaggccaa ggtgagtgga
30601 tcacttgagg tcaggagttc gagaccaacc tggccaacgt ggtgaaacct catctctact
30661 aaaaatacaa aaattagctg ggcatggtgg cagacacctg taatcccagc tacttaggag
30721 gctgaggcag gagaatccct tgaacccggg agtgggaggt tgcattgagc caagatgagc
30781 caagatcatg ccactgcact ccagcatgga tgacagagtg agactctgtc tcaaaaaaaa
30841 ggtctttct ggccagacat ggtggcccac acctgtaatc ccggcacttt gggaggccga
30901 gtcaggcaga tcacttgagc tcaggagttt gagaccagcc tgggcgacat ggtgaaaacc
30961 tgaatctaca aaaaatacga aaaaaattac ctgggtgtgg tggtgcacac cagtggtccc
31021 agctacttgg gaggctgagg caggaggatc gcttgaaccc tggaggttga ggctacagtg
31081 agctaaaatc atgccactgc actccagcct gggcgacaaa gtgagacttt gtctcaaaaa
```

FIGURE 3 (continued)

```
31141 aaaaaaaagt acttttccaa aatacttatc caggccaggg gcagtggctc acacttgtaa
31201 tcccagcact ttcggaggcc aaggtgtgtg gatcacctga ggtcaggagt tcgagaccag
31261 cctggccaac atggcgaaac ctggtctcta ctaaaaatac aaaaattagc cgggtgtggt
31321 ggtgtgcacc tgtaatccca gctactcagg aggctgaggc aggagaatca cttgaaccca
31381 ggaggtggat gttgcagtga gccaagatcg tgccactgca ctccagccag caacagagtg
31441 agactccatc tcaaaaaaca aaccaaaaaa acccgaaaat acttctccgt atcccactga
31501 aacactagtt aaggtattct aaggtaactg agagctaaat ggtgatttgc cactcctttg
31561 gcttggtggg gctggaaatc ccttttattc tcccatgttg taatgagatg tctttgctca
31621 ctcttttttt tcttttttctt taaatctcag aaggaggccc caaccctgag cacaacagca
31681 acctggccaa tatcttagag gtgtgtcgca gcaaacatat gcccaagtca acgattgaga
31741 cadcactgaa aatggaggtg tgtactgttt gacatgcttt ttattgatca cagcctctac
31801 cggctcatg tctggatggc caacaaacac actgtaaatt atcagagggg ccaagtgcag
31861 tggctcacga ctataatccc agcactttgg gaggctaagg tgggtggatc acttgaggcc
31921 aggagtttgg agaccagcct ggccagcatg gtgaaactcc atctctacta aaaatacaaa
31981 aattagctgg gcgtggtggc atatgcttgt aatcccagct actggggagg ctgaggtgga
32041 ggatcgcttg aacccaggag gtagagattg cggtgagccg agattgcacc actgcactcc
32101 agcctgggcg acagagcgag actctgtctc aaaaaaaaaa aaaaaaatta tcagagagaa
32161 cggtagcaat gtagttgacg ccctcagcct agagtcttct gagagctcac cgtccttggt
32221 cattggttct aggagcacaa ctgggagtag gatgcatagg cagtatgcag ggccatacag
32281 tcaagaccgg gactgctcag ccaagttgta gggagatgag gtattataga aagaaggggc
32341 agtgtgggag aaagccctta cgttaggtgg aggaagtgtt tgtttttcag atgtttatgc
32401 cctaaaggag aaaagccagt agaaagggag aggatggggg tgatagagat ggtgggaggg
32461 gcaggtatat agagtccacg taagggtaca cctttctctg gggcaggtag ggaggctctg
32521 aggaagtaat agttatctta atagctcaaa attattgagt gcttcctgca ggctaagcat
32581 ggataaaaac tctatgtgtg ttatctcatc gaatcctcaa aaccaccgta agtagaaact
32641 gaggcacagg aatgttaggt gagttgactc aagtcgcata gaaaatgaca gacttgaaac
32701 cagatagtca gactttagag cctgtgctct aaccgttatg cttattgcct tcatgtaggc
32761 catggtgcag agaaggtggt ggagacagca actattttcc ccacctagtg gcccttttta
32821 cctttgtgaa agaggaaggg agaagttatg agttgagaat tcctggaaag ttgcaggaca
32881 gggtgcttgg agtggggaat attgaataca tggacaaggg atgagtaggg gcatggaagg
32941 tccagaagag attagtccct agagctctgg attaattgtt tcaattttga gaccatgctg
33001 ttttcagcag ctcttacgac aaggcctagg tgtgtgatat ttcacagcag tactcagcag
33061 cccagggtag ggaccttgag acttgaccgg tgggtttctt acaggatggg ggtgtaggag
33121 gatgagtctg agtgggattg ggtagggact agatgtggca tttggttagg gatggtagga
33181 agcaaagctg agagatggct gatggattgt tcagggaccg gagaaacaga ctccttccaa
33241 gttaggggta gtacttcctg ttacctcaaa agttggttag agggtgggga caaaaataaa
33301 gattgagagc tcaggctcca gcctagagag cccatcccat ggagttagtt ttgcgatact
33361 tgtagttctg ggctgacatg tgggaaggaa ttgggaaaca ggaaaatgtg cttgtgttgt
33421 ttattgcaga aatccaagga cacttatttg ctgtatgagg gtcgaggccc tggtggctct
33481 tctctgctca tcgaggcatt atctaacagt agccacaagt gccaagcaga cattagacat
33541 atcctgaata agaatgggta agtgtgcgtc tgggaggagt ggtaggggac agagcctttta
33601 tgttccaatt ctctgcaagg caagtactgt tgatctctgc tagtgtttca gggttttgtt
33661 ttttgttttt ttgttttttg agacggagtc tcactcttgt cgcccaggct ggagtgcaat
33721 ggcatgatct tggctcactg caacctctgc tttctgggtt caagtgattc tcctgcctca
33781 gcctcctgag tagctggat taaagatacc cacagccatg cccagctaat ttttgtattt
33841 ttagtagagg tgacagggtt tcatcatgtt ggccagactg gtctcgaact cctgatctca
33901 ggtgatccac ctgcctcagc ctcccaaagt gctgggagcc accatgcctg gccatgtttc
33961 aggttttaag cacacttgct ccttagcaga atctaatgag ttaattgact ttcccttaat
34021 gtagtttcta ctagcaggat cccaaagact tgttcatcgg atgtagaagg ggatctttgt
34081 cctattatcc ccatctgtag ccatataatg cctaagtctt aaaatgctcc accaggactg
34141 gcatcttaat ggcacaggaa attatcagct aagtctgctt cctcccaact gcaatcaggg
34201 cagaaaatcg agcgtgggga cattcttggg ctgttccctt acccagcagc agctgcattt
```

FIGURE 3 (continued)

```
34261 tctccttgag gatgcgatct gctccatgtc tgtgtgtact tcatagactg ggtaagaaag
34321 agacagtgat agaatgatga gctttatgga ggctgagctt ctagaggcat ccactcatgc
34381 cagcctgttt ccttccctgt cagaggagtg atggctgtag gagctcgtca ctcttttgac
34441 aaaaaggggg tgattgtggt tgaagtggag gacagagaga agaaggctgt gaacctagag
34501 cgtgccctgg agatggcaat cgaagcagga gctgaggatg tcaaggaaac tgaagatgaa
34561 gaagaaagga acgtttttaa agtaagcatg aaaacatggg tgtttggtgg gcttccggga
34621 ggacctgat agatgcctta tgcatgcctc ttggtttctt ccttcatgtg ccccagggta
34681 taggtgagac agttcacata ttgtacaaac atttattaag tgaatactga ataggaccng
34741 actctagtga ggactatgag aaagaaagag tcaaaancat tgaaaacgat gtccctgcca
34801 gtgaagagct caaacccagt gatccattcc agtactgaca ttcaggactt tgcaaggtcc
34861 tgtgtggctt tgtctcatta cctcctggct cctcacctcc tgactttcct ttatccctag
34921 tttatttgtg atgcctcttc actgcaccaa gtgaggaaga agctggactc cctgggcctg
34981 tgttctgtgt cctgtgcact agagttcatc cccaactcaa aggtgcagct ggctgagccc
35041 gacctggaac aggccgcaca tctcattcag gctctcagca accacgagga tgtgattcac
35101 gtctatgata acattgaata accaggctac atgtgccccc gggttccttc ctagaaatgt
35161 ggcagcccat tccagcacac aggcttctgc agcaatctct gagggtaaag ccggtgggag
35221 gctcagcnag ccaggaggcc caaggacagg acttgcgacc ttgaagccaa aggaatctca
35281 cttgtggggc ctccttgtca gctctgctgc tgtctcagag ccatctggat gagtgtcccg
35341 acaccctctc ggatgcaggg caggaccacc cagctggtca gactctgatg ttgggtagct
35401 ggcctctgtg gggattgtaa gtgccctgag gcgctctgta ctagaaactg ctcttaataa
35461 taacggtgat tattggttgc tgcattgctg ttgtatggct cttgagtctt cctgagtttg
35521 tgtccagctg ttgggatcct ctggactaac tttcaagtcc ctaggcttag ctctactact
35581 ccaatcccag gattattttt ttaattggcc atagaaatgt agttgtatcc aggcactcca
35641 tggtctgatg ctggtcttac agcctaaacc tgtcattcat tcatgcaact aatatttctg
35701 gaacactagc tatataccaa gaactgtact tatctagagc ataagctatt caactggtgt
35761 cctgtgttag atcctgctct agaaggtagg acctgaacac aggactgctc tttactggag
35821 ctgtcccagg gcagtgtgag ctgctgtgca agcatctgtt gctctctttg tgtgacttct
35881 gtgcccttct ttcaccaaac agcttaaggt tctagcccag taggaaatca agtgccagtg
35941 ataagggact tggcagtggc tcacacctat aatcccatct actcgagagg ctgaggcggg
36001 aggatcactt gagcccagga gtctaaggct acagtgagct atgattgcac cattgcattc
36061 cagcttgggt gacagagtga gaactcttct tttttttttt tttttttttt tttttgaggn
36121 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
36181 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnng ctgtgtgttg cctgcagttt
36241 gtctgcttcc ctaggctttg ggaaatgcag gtatgcacag caggaatgtt tgtttagcac
36301 aaatctgatg tcaagaggaa gtggtctccc tcctcgcttg tccctgaagt aaacacagag
36361 gtagcagtta aacaggaaag gctgcaggct cagtgctgct ccccgcttc cccactccct
36421 tttagatggt attgagtctc cagccagttg caggaaacct gccactttc cattcacaat
36481 gcagctgcct agctctctat atggtgagga ctggagttcg accagatttc tgatgaaaag
36541 acaaagcccc tggaagcagt gggcctccag ttgtgacgaa gcccttaggt ctgcagtggg
36601 agctgtgccc tctgctcgct accctctcag catgcagcct ctaaacacag ccactcaagc
36661 tggcagccca cctcagcctt ggctttggta gggtggctgg attgggtgca gcttcagcta
36721 caaaatgaaa caagagctca gtgctccctg ggtatagcta gagagaaacc tcttccaatg
36781 aagaaaaagc ccccctttct caacaaatgt cacaggcctg tgctgacagc tccttagaac
36841 ggcgtctctt gtccacagct ctcttgaggg cctaccacag tgtccaactc tgaggagagg
36901 aggtgctcaa taacgtgacc gagcaaataa atgcacaaag gggtggctct gaatgtccca
36961 caagagacca agcaaatcat cgggaatttg gccttagccc taacctgccc aattcctcct
37021 gaggagggt gcccccatca ctgcatcctc aggagggtaa gcttaaaagc cagctccctg
37081 aagaggctgt aatggaagga gaaaagcatc acaacaccat ggttttccaa gtgttagcca
37141 tttataaata agtacatttg ctttcataca tacagttcct tgtacagatg acaatctgta
37201 tacatggggc aggaaaatgc attcatttga acttttcaca tctatctcac acagctcaca
37261 tgtacagaca ataaaactgc tcaagcaagt acagcaaagg aaaatgtctt tccttataca
37321 caggggtaga tgcctctgtg gggtgtgggg catcccactg cacggcttca caactgtgtg
```

FIGURE 3 (continued)

```
37381 gtgttcaata tatcaggaga gagaacaaac atgcattgga taatatactg tacagagaaa
37441 gtcctttaca tctgagtcat agaaaaccta aaggaaaact aagtgcatta aagctttttc
37501 cagcaagtgt cttgaaagga cagcaaagag gaggaagaat caaaatcata ttagtacaaa
37561 tcactcttta attgtagact gtacatgtct gtactaatta aaatcatctt ggatttggag
37621 gagacagaac agagacaaag atgctgtgct agatggaaag gaggccacgc ctgaaaaggc
37681 acctgccctg agcctgatga ggaactggcc tcactcagca ggaatcagcc aaaggaaaca
37741 aaaaacaaaa caaaaccaga acaggaagtg taacttacag gatttccaaa atcacctgtg
37801 aatgaagtgg agatctggag ccggcatctc ttaacttttt ttttcccccc agtaaattgg
37861 tatgcaataa ggcaggtaca ttcaagtact gaattttcca gaattaactc ttgtctggcg
37921 ctggggacca aagggattga gttgagcccc ctctaaccag actttctggt tagcgattag
37981 caaaagaaaa attcagccag caagtgctac aaaaacaaag cagctagggc acttccgttc
38041 cacagagtag gtctacctgg aaaaatgagc gcggcgctgg cctgatctct acgcgtccag
38101 cggcagcctg gcaagtcagc tcagcgtcgg tatcagagtc agcaggaggc aatgagatga
38161 tgggggtgagg aaacatgaaa gtaacacttg attttttggtg tccaattatg cgttcatttg
38221 gtactgactt tcaaagctct gactgtggcc accatgtggc cacaagcatc tcagggtggc
38281 tcacctgctg tgaggctttg gacaccgaaa tgaaggttac caacacttca gcccttgagt
38341 ggtctgtatg acaaaaggag ttgatgaaaa cccagtgatt attcaagtag ctctgcacag
38401 tggctccacc agccccattg tgcttgtgtc cagcccccag ccagccacct tttcttggga
38461 gcagccagag ctgagttcaa ggcattgcat ggtgaagggt tccatgacac gtctttgcag
38521 gtagctcttg cccctaagcc ctttgttcat tgttgttagt catggtagat ggtcggtctg
38581 gaattcctag aggaagagga gaaagagctg cacctcccag tgagcgagca gcaggaccgc
38641 acagccctcg gtgtggaagc agcagccggc tgcctttgca ggtcggtttc ttgagaaatg
38701 ggcagcccag gaacagacag gcagggtgtg cgaggctgct gggcactggg agcatcaaga
38761 ggaggctggg cacaggggcg ggcacctctt gccccctggg atagcctatt ccattttgtg
38821 gcaaagattc agtgagcact ggttttgtcc aaggcatttc tgcagtagaa aaataactct
38881 ctctgaatca aaccacccaa ctgtgacgct tctggagtta taaaagctgg aggctgagag
38941 gaactgacag gagggaggct catgggggaag aagggggcttc tccatgtacc catccctcta
39001 ccagagcaag ggagctctgg tcaaccttct tccagcctct gcctggctga agtccaaagc
39061 atgtagtgtt caaagagttc gtcttgcaca actggcacag atgcacgaag acccccttcca
39121 ggcctctgtt gccttctcct gaacctctga gcccgcttgc ctgttgccct ggaagcagct
39181 cctctctccc gaggggatgc cgctgttctt tgctacaaaa caagcgcagt gcagagccac
39241 agtgacacct agtggtaaac tatggtgaag cacaagtgac atccacatag cccactgtac
39301 gtgactaaaa tctaaggaaa aatacttatg gatattaaat tagatactga ttaattttta
39361 attttttcta ttgggtacat ctctggaata taaaaatacc aatatttaga gaggggctca
39421 taaactacta tacaatatta aggactgaga atacctttct ctaagctgtt ctgtttacaa
39481 taatttagga aaagtgttta ataatccagg cttaactaca ttagcaaact tgtatatctg
39541 gacaacgacc tggggtactg tacatgattc taattagtgg aatttttcctg agccatcgag
39601 tttaagttat acacatctaa aaagagggggg cacatggggg aggagcgaga agggtttgtg
39661 ctctattaac ttgggacttt aatagtgcac gtctgcaacc cggacaagat acaacagcag
39721 atacaaaatg gtctccattt tgtcatgcca aattctcatg ttacacaggt tttcccttta
39781 ctttgtaaat aaacattaat tgttaattgt taattgtgtg ccttactgat ccagtagata
39841 aagtaaccgt gtctcaggag tccctaagaa cattgctgga aaagcacttt aaaatcactg
39901 caaatatttt tcatattaaa aaattcttaa tcttttttgat gcttatatac aagttatttc
39961 ttgtgctata aatgttgtga tccactgctt gatgtctttc ctttccttttt ttcttgaaaa
40021 atacactaaa agacaagagc ggttctgcta ttttctaatg aagacattac tcacacttaa
40081 atatccagta cttcagttac aaattcaaac agtaaagtgc acccatttat agacatgatg
40141 tgatagaaac ccattagtgc aagaatcctg ggccaatgga acatacaact tggtgagaaa
40201 cctattaaac tgaagtttgt cacctctgtc ctccnnnnnn nnnnnnnnnnn nnnnnnnnnn
40261 nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn
40321 nnnnnnnnnnn nnnncaggggt gaaagataat gtgttctgga gtcagttctg gtttcaaagc
40381 atgactttgc ttcttgctag atgaatgatg cacaacgaca ccacctctct tgccttcagt
40441 ttcataattt gtaaaaggca gataataata tccactttgc aaagttaaga gctattatta
```

FIGURE 3 (continued)

```
40501 taatatgaaa cactgtaaga gtactcatca gagagcacct cctgtagtag taaatgcttc
40561 acattttcag ttcagtcccc tactccctca gggtttgctt tgggactaaa aaccactgcc
40621 acataggtaa gcatggaaag aataagctaa acaccaagtg cagagaaaaa gactcaaggg
40681 tcaaagtgga ccacaggctg accagaagca tgccaagagg ctactgtgaa agtaacctgg
40741 atcagcctgg gaactggatt tgggcacctc caagaagagg tgggnagana acagactgca
40801 ctgaagggtg tgccaagtgc tgctgagagg gtaggtcagc accttgtaag gaaaggataa
40861 gggggattcg ganncnggaa ggctgaagcc tgaggtagaa ccccagtgct ggcttcctat
40921 ctngggacag tttggcttac tggcatatgt gtgtgcatgt gtgtgtgtgt gtgtgttagt
40981 gggaggggct aaacattgtc ttttctttct ttcttttttt tttttttgag atggagtttc
41041 accttgttgc ccaggctgga gtgcaatggt gcagtctcgg ctcactgcaa catccacctc
41101 ccacattcaa gtgattctcc tgcctcagcc tctcaagtag ctgggattac aagtgcctgc
41161 catcacgccc ggctaatttt tgtatttttg gtagagacgg ggtttcacta tgttggccag
41221 gctggtttcg aactcctgcc ctcaggtgat ccgcctgcct cgacttccca aagtgctggg
41281 attacatgca tgagccactg cgcccagcct aagcagtgtc tctgaacaca gaaggctgca
41341 caagaggaaa tgggctctga ttaatgtagg aaagactgca gtctgacatg aggaagaaat
41401 tccgctagaa tataagctta atgaagctct gctcaaggtg tctagtgtag tcaggtgtgg
41461 agagggagcc tggagcagga cttccttaaa gggagatggg ggagcccaga acaaatgaag
41521 gagagggcac tcaccccagg agcttcccgg caatcttgga gttgtagatg tcacactggt
41581 gcagtggacc catgtggccc gaggctttgc acagtgtttc gtggaactgg aactggagca
41641 ccagactgag gaagtacctg gttgagaaac gtgagggcag gctggggagt ggagaccagg
41701 agtggcaaac tcagagccac ttgggaccag gcagctctga catgcagtgg ccacgagggc
41761 cccatgtcag cagtcactgc ctgagcggag gctccttggg cagggccagt gcttgggctg
41821 accctagagt gctggggggc tctccttctc tagctttctg aaccagcagt caccccaacc
41881 cttgcccccc tctgacctgc tctcctccaa gggacagcag ggatggtgta gaatattctc
41941 atcagctctg ccctctacac tggacctgat gcaaaagctc aaaggattct aggtcagagg
42001 cctcagaagg ctgcgcagcc aacaggaag agatgggcac gggtacaggg tgacatttgg
42061 acctagggcc ttcctgcaaa tcctcacccc agttcccatg cccctcaact cctaggactg
42121 gcactgctaa cagggcccag acctttaccg tatgtagggc acaccagcag aaaagtggaa
42181 cttggcacct ggatcaaagt cttcctctga gtgaggaata gcggggcaca agccctggta
42241 tttcaacctg gcagggaaaa ggcagagggc ttggtggtgg tgtctggcag gttctcagag
42301 cctctttctt ttccttcctt ccttccttcc ttccttcctt ccttccttcc ttccttccct
42361 ccctccctcc ctccctccct ccctccctcc tttcttcctt tccttctttt cttctttctt
42421 tttttttttt tttcagagtc ttgccctgtt gcccaggctg aagttcagtg gcgtgatctc
42481 agctcactgt aacctcccca tcctgggttc aagtgcgtct cttgtcccag cttcccaagt
42541 agctgggatt ataggcgtga gccacncgca cctggcctgc ctttttcttt tcaaagcacc
42601 tacgtgtcta tcaaaactgg acttggcagg ctgaggatac ctaatgcatt tttattgatt
42661 aaataaatga aaacacatgg gattgggaat cagagtaaaa caatagcagt taacactgac
42721 tgaacacttc ctctatgctc agaaccatgt ctggctctcc acatagactc acgcatcatg
42781 cactcaacac cgtcctggtc tctgggggag ggaccagtgg gggagcgggg gaggcaaggc
42841 ccctgcttgc atcctaacag tggggacag attatagacc aataaacaag gtcatttcat
42901 ctagtaagaa gtcttgagaa gaaaaaagag taacatcact gtgggcagt actactatta
42961 ttcccatttt gcagatgagg aaaccaaggt ttggagatca gggaattggc ctcaggacac
43021 agagccagtc acagtcacac cctgataacc tgaaggtctg tttttgcccc tctgagatgt
43081 gcgactgtgg gaaagttgct gattgtctcc gagtcttgtt gtaaaatgtc tataaaatgg
43141 aaggaagtag gccaggtgtg gtggctcaca cctgtaatcc cagcactttg agaggctgat
43201 gtgggaggat tgcttgagcc caggagttcg agaccggcct gggcaacaaa gtgagaccct
43261 gtccccacaa aaaatacaaa aatgagccag gtgttctggt gcgcatctgt agtcccagct
43321 actcaggtgc tgaggcagga ggatcgcttg agcccaggag gtcagggctg cagtgagcca
43381 tgattgcacc actgcactcc agcctgggca acagagtgag accctgtctc aaaaacaagg
43441 cttcatcatt ggctcactgg agcctctgaa ccatctccaa ggtcaacaga gtgtcaggag
43501 cttccctccc agttgacagg gccttattca aggcccaggg agttgccacc cctcctgctt
43561 agccccaggg ttccatcagc tggggtgatg ggcagggctg acagaggcct cctgcaggtg
```

FIGURE 3 (continued)

```
43621 cctcagatgg cctatgaggg tgaccttaga gaggcacgag gtcaagactc tgccaagccc
43681 accaggggaga cctgctcctg aagtcaaggg tgggagtgag aggacaaggg gaggagctcc
43741 cagctctgtc acctgctcgt ttgctgtgtg acctcgggct ggtttgtgac ctctgtgagc
43801 ttcagctgtt gcttctgtga gctgagcgct ttgaagtgat cacaacgcaa ggtggttgta
43861 aatgttcaaa ttaaacataa gaggccgggc acagtggctc atgcctgtaa tccccgcatt
43921 ttgggaggcc taggcaggca gatcccttga gcccaggagt ttaaacctgg gcaacatggc
43981 gaaccccatc tcttaaaaaa aaattacaca aaactagcca gtatagtggc gcacacctat
44041 agtcccagct actcaggagg ctgaggaagg aggattggtt gaggctggga ggtcagggct
44101 gcagtgagcc gtgatcatgc cactatactc cagcctgagt gacagagcga ggccctgtct
44161 caaaaaacaa acaaaaaaag taagagcctg ttgcagagcc aggagcaccc cctggcaacc
44221 ccgaatcaca ctatgaccag cagactgaag ctggtcagtc cgcggcctgc cacatatgga
44281 ggagccctgg tcacaggcat ttattatccc atcaaatggc caggggtcag tgatgaggtg
44341 taacacgggg gtccctcact cgagagtgat gcctcccaac tgctggtggg ttcccatggc
44401 agcttgggga tgttaagccc gaggcaggca tgcgtgcatt ttaggggcct gcctctctcc
44461 catggggagt ctttccccag aaaggaaagt gctcaggccc ccgcacactc cattgcctgg
44521 caccaggaag ggagggaggt ttgggagggc ctgcctggtg gtcagtgttc tgtgattaga
44581 gaagctcagt tgcaatcatt gtgtgagctt cccagctacc cagggagcag gtggggccat
44641 caccagggtc cattttttcac agatgaggag actgaagcct agaaaggcta aaagacctgc
44701 tcagtgcctg tgtggaagat tagagaggtt cttgtgctgc agaaagtcct ggaaatggcc
44761 catctggtgg aagatggtgc ccaacccacc tgaggttcca ccactcctga ttgtagatgt
44821 ccttccagat ggtgccgtca aagaccttcc agcgaaacag gtccatcagg tagccaaagg
44881 ggatgaaggc gatcttctcc agggcaatat gcatcaggaa attgacctca tcctctggga
44941 agagggtgag ggcagtcaag aggcaacccc tgggatctcc ttcccgtagc tttgcccgag
45001 agccctgacc ccaccaagcc ctagctgcgg tcccaggctt gtgctgccct cctgctgggc
45061 ccttgatcct catcacctga gtcctggtgc tagaggctga gcaggcctat gttgagcagg
45121 tgcttgtggg aggaggccga gagggtgatc acagacccca cagcctcttc aaaggctggg
45181 ttggcacctg tgcggaagat gatggagagg ttcttgtact gcaggaagta ctggaatggc
45241 ccatttcgtg gaagatggag agcgggtctt ctgtggtcac ttccgcgcac ttctttattc
45301 tacaagcaaa gggcatgggt ncaaggagca tggagaaagg gagtttcccc attcagactc
45361 cttgagggat tgggtggtcg ggttggagcc cagacaggcc ttggcagttg ttctttttt
45421 tgttttt tcaggggat tgggggaggc gtttt 
45541 gctgggatta caggcacatg tcaccatgcc tggctaattt ttgtatttt agtagagaca
45601 gggtttcacc atgttggcca ggctggtctc gaactcctga cctcacgtga tccactgncc
45661 ttggcctccc aaagtgctag gattacaggc gtgancaccc atgnccggc cggcaattgt
45721 tctttcttac tccaggcccc atatccaccc agcaaccaag cccttcctc tcacgtcacc
45781 tttccttctg tgtttctcac ttgccttctc cctcctctgc cctggctttc ccctgcccat
45841 acctaagaca gccagacagg gcagaggaga ggaccgggtg tgtggtgccg ctgtgagcac
45901 ctgaaatcgt cgtcctggta gaagttccag gcagagatgt gacactccac ctctcgccca
45961 tcggttggcc tcattagcat caacttttc cagaaactgg gtgggcagg tggcagcgcc
46021 aaggnaggtg aagaatgtct cagcctcttc caacatttc tctggcttcc agtgctatgg
46081 gagaagaggg ggtgtggggg gcgctgccct gtttgtccaa ggatgccaat ggggaggggc
46141 agggacagac aggccaagca ctaacctgga cttcatgat ctttgtgaca tcctctggga
46201 tcttcttcag gaagggcagg accgggtcta agatgttgac ccaggactga gccaacgtgt
46261 tctctggaag aggaggagag gggctaagag gaggctggag acagtctctg cccttatctg
46321 gcactcacct cggccaccag cagggccttt acccaggagg tgggcaggga tgggcccct
46381 caggtcgatg agctcgggcc catagtggcg gtggagggcc ctgcgcacgt aggtgtgcgg
46441 gttcaggtag agtggccgca gctcctggaa tagccgctcc aggtcttgct ccagggtatc
46501 cgactcatac ttggagtgcc acaaggcccc catgtctttg tnaacctagg acaggagaga
46561 ggactcacca ggagctcacc atctcaccct ttagccatgg cctagctgac aggatacccca
46621 gacgccttct agggaagcca ctcaacctcg ctgaccgtct gggtcttctt ggcaaaacg
46681 gggagaatac ctgcccattt cagaaaggca ctgagcaaag tccatgatcc gagctcccca
```

FIGURE 3 (continued)

```
46741 ccatgcctgc aaggccctgn agtcccctct tatcccacct catccttagc cctgtggcca
46801 cctgggcttc tttcaggtct tccagagcac cggctcctcc tgccgcggag cctcntgcct
46861 aggctgctct tctttcacat cttgcttccc gtcttttgcc catctttcag gtcttggata
46921 aatgtcagag tnccttccct gtccacttgt ctgcagcagc ctcttctcat tctctttctc
46981 agcagcctct tcctattccg catcacccca gatggtagtg agagacaggt gtttactgaa
47041 tatggtctgt ctccctgcag gaccgtaggt gcatngangg gcaggtgcct gtcttttcac
47101 ctatgtgtcg tcagaacctc cccagcacct agcacctagg tgnctctatg aatatttgga
47161 gagccagct gcagggctca taggtcctgt ctccnagggc cctacggcca ccttcactct
47221 gggaaagctc agctttgccc cttccttgcc atcactccaa gctctgtggc atcccatctg
47281 ctcaccgttg agctgtgcag ccttgttgct gagctccaca tagtgctcga aggtggtgca
47341 gatctggcgg cccacngcat cctgccagcc ctgccaggcc cacagcagct cctctttgtc
47401 cctggaggtg gccatgactt cgagttctat gcccagaaaa ggagccatgg gggacccact
47461 cccacttgcc tcttccctca ccctcctggc aataagggag ggtggttggg ggctgggagg
47521 ggcccctgga agggactgag tgctggagat tctgtggttg ggtgggacag ggcttgggtg
47581 ttcaccagac tccagggaca ggcagggccc ctcattcagg cacacctggg ccatactgta
47641 tgtcatctcc aggntaggcc agaagctcgt tatactgggg ggacaggtgt tacccaggt
47701 aggctggtgc cccaggtccc cccccagtgc tcgccccacc agccaggaga gatcggtacc
47761 cccacctcta ctcctctcct tctccagagg aagttctgat cctgcccttc ctccactccc
47821 tgcctccctc ctgccccagg cactctgtct ccctaccag accctctagga ccagggagca
47881 tgtgncctaa aggcctgggg gttccatcca tcacctcccg cagctcgtcc ttggacagag
47941 ccgccttgtc tatgttctgc agcttactca gcatgccatt cacatccggg tccttgaact
48001 gggtgacttt aaacaggtgg gcctgggtgc caaagtaaat catgaactgg gacctctcca
48061 tgtccttgtg cagctgcaaa gagagccacc aaggttgggg gacaggggaa gggtcccact
48121 tgacctccag ggccatggca ccctaactga ctccctaatc ccattggctt agggagcaag
48181 atttgctgag agggagaggg cagaaacctg gatctctaaa agcaaggagg tgagatttac
48241 aaaggacaag aagcaagaga ttcttgcctg gaggaagatt agggcttcca ggaggcccag
48301 agcttgcagc cctctttgac atgtacactg gggcttccct tgttcctctt gcttgggatg
48361 ggggcaggag gtgtggtgcc ccatggtccc aaatccctaa aaagagcaaa gagaggagag
48421 gctggggtgg aggtggtatc acatcatctc ctcctgattt ttcctggtga tattggtgac
48481 atagttccaa gtggcctcca tgaacttgtt caacacaact tcacctgttt ggtcataaaa
48541 ctgcaggaag atcttggtct cggtctcatt gtagaagtca tctgcaggga aggatatggg
48601 catcatgtgc tgagaaggtc ctgtccgcac ccagtccctt tgtctggtcc catgcttctt
48661 ggggtcccag ccacacctaa actgtgttca cccttgatcc tgagccaagg caagagctgc
48721 ccataacaga ggagcacaag tagggaaggt ccagggcaag tccaccttgc tcccatgacc
48781 aacagagcag cagagctggg tgaggccagc tccatattgt gacgtcagag gccagaggct
48841 cagctacaga atgttagaac tggaaatccc catccacctc ctggtccaac tgtccccatt
48901 ttacaggtgg ggagactgag gtccagaaag tcaagccaaa tgatctggtt catgtagtta
48961 gctaatggcg agccaaaaag aggaaccagg ggtcttgact tttaggccag aacttgttct
49021 gctctcctcg gccactttc cctggggctt gagccaccct tgggttatgg ccagggattg
49081 atgaggccct ccctccatag gctgggacca cttctgagca ggtggatggg atgatggatg
49141 gatggatgga tggatggatg gatggatgga tggatgtgat atatctgggt ctctggaagc
49201 caggttatct ctctaggttc ttctaacttg acctcttatg ttcacatgtt tgggcttttt
49261 ctctcttatg ggctgtgcaa tcaaccccag ggctgtgcag ggccctcccc atcatcccta
49321 tttctccagg gagaccctga tgttatgagt ttgcaattag gagagggcac acaaggtagg
49381 gactgggtgg ggtgtggaga ggtgaggcgg gcacctcca tnccagggtg catgcccatg
49441 agtacctgag cctgatctga aaaccagctg gcaagacacc agctctctgt aggcctgtgg
49501 tcacccccag tactcttgca ctgaggtctg tggaggccag ctccatctgt ctcaccttgg
49561 atttctcctc agactcactt ccctccacac tcagaatccc tgtaccctgg gttgccttcc
49621 atcactctca gcccacaatg gctcacatct tcaaaaaggc cctacctcta cacatgggct
49681 gataccacga ctagagaaac tgaccaaata accccccaat atgatccatt atgggtaaaa
49741 tatatttata acatgaggaa agaaagaaaa aaatagtgac acttctggtt aagctgatcg
49801 actgagctca caggaaagtc tcccttcctg cttcaagcat gtagacagtc cattctcaca
```

# FIGURE 3 (continued)

```
49861 ttgctataga gaactacctg agactgggta atttataaag aaaagaggtt tagttggctc
49921 tacagttcca caggctgtac aggaagcacg gctggggaag cctcaggaaa cttacaatca
49981 tggtggaagg cgaaagggaa gcaggcacat cttcacatgg tggcaggaga gagagagaag
50041 ggggaggcgc tacacacttt taaacaacca gatcctgaga actcagtcac tatcacgaga
50101 acggcaaagg agaagtctgc ctccatgatt caacacgccc acctctcctc taacacaggg
50161 gaggtcaggg tgcatccatc cagagagctg cagcattggt gtggggggat agctgatccc
50221 gatggaaatg gcgtctctgc caagctggga gcccctgcaa gcgtcaggtg catgcatggg
50281 attgtgcagg ccattccaac ccaactgaag atggctgata ggtacagttt accaagtata
50341 agagaaaatc cagttttagg agggacaata ataattacca accctcactg tgggttggtt
50401 ccaggtgcca gggaccatct gggggctttc aacatatgaa tcctcacaag aaacccatga
50461 ggtaagtact gtgatcaacg ctcccatttt acagatgagg aaagagaggt acagaacggt
50521 tgaggaattt gctcatagtc acacagccag cagatggtgg aagtgggact caaattcata
50581 tggttggttc cagagcttgt gctaaactgc agacacaatg aatgaagcag actgcaatgg
50641 aggaaggaca agtagcagag caatccaaaa gggacttaaa atgcaggtct ttatgccatg
50701 tataaaaatt agctcaaaaa tggatcacag cttattttct tttttcaatt taaaagagta
50761 catttaaggc tgggcacaat ggctcatgtc tgtaatccca gcactttggg aggctgaggc
50821 aggtggatca cttgaggtca ggagttcaag accagcctga ccaacatggt gaaatcctgt
50881 ctctactaaa aatacaaaaa ttagccaggc atggtggcac atgcctctaa tcccagctac
50941 tcgggaggct gaggctggag aatcgcttca cctgggaggc agagtgcagt gagccagatc
51001 acaccactac actcnagcct gggtgacaga atgaaactct gtctcaaaaa ataaataaat
51061 aaaataaaaa taataaaata gtacatttaa caccttatct tggacaacgt gacagtcatg
51121 agatctttgt gtnggagaag aangggggaa caaaagagca aagtctacaa aattcttaga
51181 acacagaggg aagtttcatg acattggatt tggcaatgat tgcttggata tgacatcaaa
51241 agcacaggca acaaaagaaa aaataagcaa attgaacctc atcaaaattt taaactttttn
51301 catatnaaaa aacactgtaa cagagcaaaa agganacaac ntggaatggg agaaaatatc
51361 tctgactctc agatcnacga cgaatnaanc gccagaaagc aaaaagaaat nnnnnnnnnn
51421 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
51481 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn gaaagaatta cccccgctca ttcttgtcta
51541 aagcccccct cttgcacctc ttctctcccc cagtcccgga gctggtaacg gccctggccc
51601 catgagcagt ttgccttctt gagtcactgc ctgtgtagta catacctgac cgggagtcca
51661 aaccaccttg gtgctctgaa gtccactgac tcatcacacc tttcttagcc tggctcctct
51721 caagggcatt ctgggcttgt aaacagacat aggaagcctc tgtttaccct gaagcaccac
51781 tgtccagccc attggttccc actggcagca tggtagagct gagagaaaca ggctctcagg
51841 gtacctgact tgaggggaat cgtttcatga agctgaactt caagcatatt tccagtacat
51901 tctttcagag tctgtttttc catccaaata taagcgccag gccattccac ttagtgtctt
51961 ttcaatgata ggcaagaatg atatctgagt tgaacttcgg tgcttctgtt gtttgagttt
52021 actgtgcctg gtggtatatt gggcattctt tggattgagt gttctgaggt gagagagtct
52081 tcccgaggca tcctgtctgt gcttccaacc ctgaacaaga ccttacatga gagatggact
52141 gatggactgc ggcaatcctg ggctgtcaag tggatagata gttaaaaagc attatactgt
52201 gggtaatgaa aagggagagg aaaaaaaaag aaggaaaagg aattatagac ccccagggtc
52261 agnccagtta agagctctac ccacacctgt caacccctct ctcccccagt ttaggttctg
52321 agcagtattg gacttgtagc ctgcagttgt cttttgactt gcaggccgca ggtgtctttc
52381 tgttatgtga atgagttcca tggaggggca tatgtgtgat tccaccgtta gatgagccct
52441 tggggcagng cagtttggga tgtgctcttg ggggaaagtt ggctgtttcc ttgcgctctg
52501 ctcctacccg aaggttttta agtccctctg aattgnctnc atctgagatt agtagagtag
52561 caggcctgaa ggatgatggt tttgtcctct ttggttctca cctgcttgag aagtaaaaca
52621 gtaactttgt tcttctgggc ccttaagctt ttttggttaa gtcttccttt tcagaagtag
52681 atgtcattat atgccaaaag tctagctctt tgctttacca tacagggacc tgtcccaaag
52741 aaaaaggctc ttttttttagc cagcatattt cccctcctac ccttttactt tgttgttctg
52801 attttaggac tctggctggc catgtgcttg tggttgcctc tcctgcattt gccactggat
52861 ttgcactgca tcgtttggag atacaaagcg agcagttctt ggtcagaacc ctcctctgct
52921 tttcattgtg tttgataatg gttactgggt ccttctctca agggtagcaa ggccaagctg
```

FIGURE 3 (continued)

```
52981 atggctgctt gtttaggagg ccatcagttc cttcctgtgg agaagggtct gaaatggaag
53041 tcagtggtag aaggggctgg tctgctgggc agggcttaca tccactgagt tctaagattc
53101 ctttcctgat ctgcacctac gcctggtctg tatggtggaa tttgtcagct ggaactcaga
53161 aacaacaact tgaaaaaaaa ataataatta gaacatattt gcataagata gctatttact
53221 ctggaaacca acaacttttg agatttccct tgccctgtgg acgcccagct cctgtcatcc
53281 ttccttaggt cctgcagtac agtcttcccc tgaatgccac cggggaccca ggggggactcc
53341 acccccctaa gcaagcacac acatactcac agttgatgag ttgctggtct ttgagtccca
53401 gctctcttac cctcccttta ctccaccagc ccgacgaccc atgactgagg aggggatttc
53461 tacagtctca ggatttagaa agtctgtaag ccatccatgc tccagaaagc accgatctgt
53521 tgtagttgca aaaacaactc tgtaatttgt tgaggttctc aaactgacag ccagcgagac
53581 tgggtgggag gccctggatc tgttctccct gactgcggga ggagcagcca ctaggacttt
53641 agcaggaagc ccacatggag gctccgcagg ctgtggccca gctggtgatg gcccttttgc
53701 tcctggcagc ctgaggcaca gctgcctgta ttgtcctcat ctgttctgac tgaaggatgg
53761 aggtgctgaa taaattaggc ctcaggcctc taccaccaga gagctggaga atgggtccac
53821 gtcattcaag gacctgaatt ttttatgctc aggagcattg gaatcctctt cttccaggga
53881 ggaattagcc tgcaaggtta ggacttgaag agggaaggta tttaataact gggcgaggat
53941 gggtgtggtg gctcacacct gtaatcccag cattttgngg aggctgaggt ggccagatcc
54001 caaggtcaga agatcgagac catcctggct aacatggtga aaccccatct ctactaaaaa
54061 tacaaaaaaa aattagccgg gggtggtggc gggtacctgt agtcctagct actcgggagg
54121 ctgaggcagg agaatggcgt gaacctggga ggtggagctt gcagtgagcc aagatcnggc
54181 cactgcactc cagcctgggc gacaggagca agctccgtct caaaaaataa aaaaaaaaa
54241 aaaaataggt gaaaattcct tataaatcca ggattggctc tgagagaact ggctaagatt
54301 caggaagaaa caaaaaattc agaatcctac aaggttttga tgacaattag ggccaaaatt
54361 ttaggaggag atgtaggatg caggagaaaa ttaaagtgtt ttctttatat cagaggagga
54421 aatagtagag gtcagtgaag gtctggggta gggaaacatt cagactgtcc attgcatggc
54481 tgtggagtga gactgccctt agcctgggcc agccttcctg cgccacaaat tgggcatccg
54541 tgatgctagg taactgtggg aacaaaatga cagcttagag cagccatggg tgatgtttgg
54601 tggtaaaaaa cctacaggcg tttggggtcc catgattgtt ccagaccatg actcttcctg
54661 gttgtgggtt tgttacagag caggagaagc agaggttatg acagttatgc agactttccc
54721 cctcctttttt ctcttttctc ttccccttgc ttttccactg tttcttcctg ctgccacctg
54781 ggccttgaat tcctgggctg tgaagacatg tagcagctgc agggtttacc acacgtggga
54841 gggcagccca gtactgtccc tctgccttcc ccactttgag aatatggcag cccctttcat
54901 tcctggcttg gggtagggga gaccattgaa gtagaagcct caaagcagac ttttcccttt
54961 actgtgtgta ctccaggacg aagaaggaag atcatgcttg atacttagat tggttttccc
55021 agggaagagg gcggagcaga gcaaagtcac tgtgaacct gggccaggcc ctggctgggc
55081 cagctcctga gagcgtctcg tgttgcagac ccttgcccac ttcacccacc tgcaccttct
55141 cccctctca cagtgtcact gctgctaatg gtcaaagtca aatgtgtggc cacatgggat
55201 gggccaggtc ctctcaggct actttctgga tgtcattttt aaaatatgga aacatgcagg
55261 tgccttccca aagaggcttg gactggtata tccaacgaga aacaaataag ctaaagaaag
55321 tttaaactca agaagaaaga tgttgacagt ctatgtaaca gctggaaagt ttataggcac
55381 ccacctttgg gacaacccag tgattatgaa catgtgatat ctactattta aaagaaatgt
55441 tctcaccttg ggttgattgt ggtaccat gtgttatgaa aattgttgag ctgaagcttt
55501 gaatcgattt agttgagtct gactcacttg ctttggttcc tgtgtatttt actacccctc
55561 ttgtcagtga ccttccttcc ccaccccacc cagagtgaat ttgtagcatg attgtataaa
55621 cctctatgta gaaaatggag atttcttgct ctgaaatgtt aagctctaac tgatccattt
55681 ctgtgtcctt tagcctagta tgtctgaact tccattcttg ttatatattt aaactttccc
55741 tctatattat aggttttgtg gcatccacgg tcaggtgtag aggaagctgc cccttgcaga
55801 actgtactgt aatatttttc ttttataaat attttcacag gactgattgt acacagggct
55861 tgtaataaaa ttttaacact gtgctgtgaa acaactatgg ggaatctcca ttgaaggcta
55921 cttcatgggc acctgaaagt ggagtgttat agctatgact ttctatttct tgtttcctaa
55981 gtaaattaaa cctaattttc acccttcat tctgtttcag cctcctgtat aagaagtacc
56041 gtattttctg cccatcatac tttgtaataa aacttgaaca tgtatagatt gactgaattt
```

# FIGURE 3 (continued)

```
56101 ctttttgtga cgaattcagt tcttcccatt ttgtcacttt ggtcatgttc catagacagt
56161 ggcagtgccc cagcccgagc cggncagtnc tactcatcac cttttatatc ctatttagtc
56221 attcacttgt taattcagtg gagcacctcc tctatgccag gggacatggc cctcaagttg
56281 gttgcagtct accagaggag acatctacat aaatacttgt ggccgggcac agtggtctgt
56341 gatcccagct gaggcatggg ggtggctgag gtgggaggat cacttgaggc caggagttca
56401 agaccagcct tggcaacata gcaagaccct gtctcaatca atcagtcatt tttattaaaa
56461 aaaaaaaaat ttcttttagc cagactaaga tctaagacaa atcttttttt ttgcatttct
56521 tttttctttt tttgagacgg ggtctcgctc tgtcacccag gctggagtgc aatggcgcga
56581 tctcggctca ctgcaacctc cacctcccgg ttcaagctat tctcctgcct cagcctcctg
56641 agtagctgag attacaggca tgtgccacaa cacccgactg attttgtat tgttagtaaa
56701 gacggggttt caccgtgttg gtcaggttgg tctcgaactc ctgaccttgt gatacgcctg
56761 cctcagcttc ccaaagtgtt gggatggtac cgagctcgaa ttcgtaatcg tggtcatagc
56821 tgtttcctgt gtgaaattgt tatccgctca caattccaca ccacatacga accggaagca
56881 taaagtgtng agcctggggt gcctaatgag tgagctaact cacattaatt gcgttgcgct
56941 cactgnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
57001 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnntattc tagtcaaaaa
57061 caactggcat gcagcagtga tacctactcc ctcttatgat ggccaaaaag aatggcattt
57121 tgactgttga cattttaggt gttttgccca tagggtatag gcccnaaatc ttnttgncct
57181 ggaaaactga gagaccctgg ggagaagcgg catcagcggc atatttgtaa agctacagga
57241 cctgctcatt cgcctggaca ggtgagtgcg ggtggtgtgt ggcgttccaa atgagcagga
57301 gcactttcct gacagacact gagaaattct tcaaaatgca gtggctcctc agcgagaggc
57361 ggttttaagg agtaagatgt aaagatgcca gcagtgctga gacctggcca aaaagcaatc
57421 tgagaggcca ctgggctcct ggctagaggt ccccgctaga gctacacatt tcatcttcct
57481 gatgtgagag agaggggtat agagatggag agaggacgct gatgcctacc ctggtctagc
57541 tgagaaggcg tcgctgatgc ccaccccggt ctagctgaga aagcagtcct tagctatcag
57601 ggagtgtgga aagagactgg ggcttgagtt agtcttgcta tttgctttcc agccaccaga
57661 gacaagtcct gccctgtttt aggtttgggg gtggagaggt ccgtctattt cgcagaatct
57721 aaattagtaa agaaatgctt ctgatctcag gttcatgctc cctgtgtctt aatgatccct
57781 tcaaagggca cttacttact tacttactta ccagacacat gggactggtc gcagccagat
57841 ttttattcag gaaactgccc ttcctgcagc ccttccctaa cagagcagaa tgattcctaa
57901 caacagagaa cgaatgctcc tttgtttcgt ttcagttgct tagttgagtt gtttagttgt
57961 aagagctgat gtacagccag tgccaggcct gtgccgaggc tttggttcca atgttcttgc
58021 tatccactca atagtggcct cgctcactca aaggtcagcc taccaaatga ccacgagacc
58081 tagaagatgt gtcttctaga caagcttcaa gatcagaagc ttgctgtcta tctcatgccc
58141 ccacccaggg ctgcaaaaca gggctgaaag gggtctttct tcaccctgaa acagtttttg
58201 ctgcgtctga ctttaaaata tcacactctc ataaacactc ctagaaaaag aaaagaaaca
58261 gttcctgtaa taatagataa tcaaactata gatctcaaaa tggaagtaga caacaacggg
58321 catgaccctg ggtggaaata ttgggactca gtctcatggt cccaagagat tccaatctgc
58381 ttctgaaaga aacaatttct gtatgacacc atctgggttt acaggaagag ggccactaga
58441 acaaatctg ctgtaggtg aagatccaac taacgggatt gtcacaccag ccagccttcg
58501 gttagagttt cctttagtg gagtatgaca ctcagtgatg tatcaggatc taaaaagtag
58561 atgtctccag aacagacttc ctatagcctt tcactgagaa tccagaacaa tctttttgt
58621 ttttctatgt attcattccc tcccccaccc tggaaaagca gcagctttta gtggttaatt
58681 gtcggctaaa aatctagaga ataactctca gtgaattctc ttaatagcca caattctcat
58741 ctaatttcct tggctgactg caatatttaa agggctggct gttttgaca tgttcctaca
58801 atgcctcttg gaaaatcaat gtagtgacat tttacataat tatattgggg ttttcttcca
58861 atttagcact taattcttct ctctctgatc cttttacccc ctaggaagac cagcaataat
58921 cctaatgcac actgcagacc tggtggctgc agggcgctgg cggtctgggg aggggccaca
58981 gcatgagaat gcgctgcggc tggctgtgtg ggtgacactg ctaaggatg caaaggcaaa
59041 ggggcatcgc actctttcta aagtttctag aagaaacga acaagaacac cttatttttt
59101 aaaaaaggaa aaagacaatt acacaacaag aacatcagtg aaagcgattg tctcctggaa
59161 aaagctgacc agtgtgtctg atctccctgg gttaaagcac acagcacgaa aatctcctcg
```

FIGURE 3 (continued)

```
59221 ttggcatctg aagagaggga gagagcatgt ggctgggcac agacaagaga aactgaagtc
59281 ctggctcccg ggaggccgct tcccagtcgg ctgcatgcaa aggatttcag catgtgggct
59341 gccacctctg aacaccacac agaaactaca tgagaaatta agccagagaa ctacctcgaa
59401 tgtggaaacc aagcctgaaa atgtgcagtg aaaacatatg ggtctcactc caacaaaacg
59461 tcttttaaac attagactcc acgaacggtc tctttggttt gataggggat gtctgccctt
59521 gccgagagtc tcgggacagc tgcctgtaca ggttgtcctg gtatgcctga gccacaggta
59581 gagtccgagc taccttcacg tcgggatagg aggaggcctg gctgactcgc tccaagaggt
59641 ctccacgaga cccgttagcc agcatcccat gggggctgta ataatcgtcc tccagcaaat
59701 ggccattctg tgcattgttg gttttgttat aaaaggcaat gttgctgatg gatgatggtg
59761 gactgaagga ctcaggctga ggcaggttgc cnggagacgt gggactgagg acggtgtcca
59821 cagatgacac tgcccaggtc cgattctgct ggtggaggtg ggggtactgc tgagtccgtg
59881 ctgttttatc tatgatcccc atgaatggtg tggtcctgga tcgggtgggc tcactggggt
59941 aacctccttg agnttgngag acactggcga cagctcngtc acatgacctc tcatatgcag
60001 gtttcagtgg gatctccatt tgctggatgg aagaagatgg ccggaaggtc ggagttaggt
60061 tggaggtgga ggagatacta ttgctagatg gagagaagcg aaggcctaca ctttgggaat
60121 gcagcaacgg cctgggagtt ggcgggtgcg gtttgatttc gttagggttg acactgatag
60181 gtcttctgat taaatgcgac acatcagggg aacctagttg gctggaggag cgctccagat
60241 ctagtttga gtgacagact gggtaatagg atgctgactg gctgcgtccg atctgtggtg
60301 tctggctgta tctcacgcca cctcggtatg ctgaggaagg tcgctgtgga agatcctctt
60361 tggtcaatcc tccatgctga cagatggcgc ctgcactcag gctggcttgg acatgctgca
60421 ccggccttcc atcccctacg attcccccaa ttgacccttg ataaaccaac cggctctggc
60481 tgactcctat gtctccttgt gaagactggt atttactggc cattgaatgg gctacttggc
60541 cataggctcc tgtggggatg acggtgcttg aatggacggc tgggctgggc tggttacttc
60601 tcacaatctg ggccttggca ggctgtagcc tgagcccttg ctggggaact gccacaggga
60661 gctgaggcat ctggtagggc cgctgggcca ttttnggata atggagattt gggtctgcca
60721 ggaagctgac tgacgcttgt ttcctgctga tagcgcacgg gtgaaccaga ctgggatcta
60781 tagacactca tactttcagc tggagggctg gcccgatact gagggcctct ccggagaggg
60841 gaaggggggag ggcttgggta ttctttgccc tgtcctccca caggaggggg gctgaaacgg
60901 taagatcctc cctgatgagc cggggaagtg tgtggtgggc taggcctgta atgtgagttc
60961 tgatgagttg gagaaagggc aggtgaggtg gactgatagg tctgtctagt gggagagcct
61021 acagaactac tggaccggaa gtcaaaaacc tgatgagagc caagaggtga gctggagatg
61081 taggctgagt cccgatgcgg gggagaggag ggtgggctct ggatgaccgg gagcccctgg
61141 ctgggccggg cctctgtctg gaggccanat ggaaacattt tcaancatcc tgtntccagg
61201 tactcctcct cgaatatatc ctgtacagag tatatgtctt catgctgtgg ctcaggttct
61261 gcttcttccg gcaactgctg ctgaggctgc ggtggcggcg gtggctgctg tggctgctgc
61321 atctgtctac actcttcttc cactctcagc agaagtctct ggatctcacg gttgttggga
61381 cacagcttga tggcctcgtt caggtcctct aaggctgctg cgaactgtct gcttgacaaa
61441 atgtgaacac aggaactgga gttattctga atccagagaa atcaccaaga gctgagaaca
61501 tggtcactat ctcagagagc tgtggtggcg tctgtgggag tctggggtat ttcggtttag
61561 ttggatttat agggaaggaa acaggaagac tcattctgga agagtccgaa tgattcccta
61621 acccattcgg cctccatctt ccttctggcc tctctgggaa tagtggagaa atgccccatt
61681 ttgtcagtcc angccaggcc cttcgggaag ttgtttggt gcccaaacac acaccaggca
61741 gtatgagagt tgggtggggt tgtcatttac agggtcactg tcaagtagct taggaacaaa
61801 aaaaactaca tatttaaaaa tcttgctgat ccagcagaaa tttttcttta tattctcaat
61861 attttagctc caaatttcag gcctgttcta ctctaggcaa gaaccctgtc ctctgccctt
61921 tctaacccc atctctcaga attgctgtgt ctccatttgc tctatcaaag tggggcaggc
61981 attaggcttg ctgactaggt cactcggggc tggagctgag ctgactccaa ggagactcta
62041 atttacaaat gaagaaatga actgtcagag acattcccat cttctctact aatatcacct
62101 gacagggca actgaccttg tgaaaaagga actnacccag aggnaangga gaatttcagt
62161 cagatttctg tgaggacttc gttgccccag ctaggtaaga gtgcgatcac tgccaccacc
62221 atcactagcc tcaagctggg tgtgattttc gggaccatgt gccctggcc atagcagtga
62281 acctgaagca gttctttccc atgcagctgg ggaggaggag ggcaggaggc ataagagaca
```

FIGURE 3 (continued)

```
62341 gtgacaagtt acacaaagat cactgatggc aggttctagg ttattctggg agcttttctg
62401 cccagtggcc aaactaaagc agatgggcac aaggaatgtg gaatggtgtt ctcttagagg
62461 gtcctctcca tcctggcagc aaggacctct tgactctgtg tgtgtgtggt gggtgatggt
62521 ttaggtggaa gggggtctga tgccaccaga cttgaggaga gccccagagg gaagactaac
62581 taatccggga ttcctcaaac gcctatggga gaaggaagag gaacctgtga tgttaagtga
62641 accatcctac tttccctcta aagcgggggt ggggtgctct gcttaagtga tttctttaag
62701 tcgccgttgt ctctttgtgc tagctgctct gggggttgaa aaatgcctga gatacggcag
62761 aggcttcttg gaagaagctg ccattctcca gtgaaaagt gttttctcc cgaagtgaaa
62821 cattcgtggc ctccacagcc cagcagattt gctgatcttg agctgagggc tgtgctatgg
62881 gagccatccc caaagcttgg ccctgacagt tctcaaggac agagatgtat ttgggtacat
62941 atgccccagg gtggccgacg ctgccttggc caaattttca gaaaagagac ctcttgcttt
63001 caccctctct ctctctcctc acctgctgct gcgttttgcc ncttgntctc gcatagtaag
63061 cttcataaga tttcggtttc agctccaggg ccttagtagc aaattcctcc gccattccaa
63121 aatcctgtca ttacaatagg tgtgcaaatg agtcattgat gagatataaa aaatagacaa
63181 cttgggaata aaacaaatta tttgtacatt ttttgacatt catggatgga acgcctggga
63241 cgctagacgt gcctgacatg gctcaagccg cgtggcctgt ggactgaaag ttccttctgc
63301 ctttgtcctg tgtagcgctg cgactgctca ctggacttta tctgcccaga atattaaaat
63361 agttttaatt ttccctcttt ttgcctttct aataaagttc tcagcccgga agccaaacac
63421 caacccttttc cagtgaagct cctgaagtta tccatgcatg taggaggcaa acgcacacat
63481 gtccacattt cacgtggacc ctggtctgag ccccacacct tcctgctaca tgcactacac
63541 tgtggctttc taagggacag gtgagaaggt gtcctgtaaa gtccgggagg atgacgtctg
63601 taaaggaaac tgcactgact acagagacta gagggagagg gggtgtcaga cagacctggg
63661 ttcaattctc tgaccagctt cataaccccc aagtgtatag tgtattttct catccatacc
63721 taccccgggg gtaggatcaa gtgtgataca gtatttaaaa gccctgcaca gttcccggca
63781 catagtaggt gctcattaat tatcgtnttt ctttctattt cacagaggct tctctgatct
63841 gttccttttt ttaactggtt ccttanctta ggaaacactt aaaattaaaa ataaaacaaa
63901 acaagagaag accccagctg tgactgaggt ctgtgctctc cctagaggaa cacgctcaca
63961 ggcatgtcat tcctgagaac ccctggaaac agagactggg gggtggggtg gggaacaacg
64021 ccgactaggc agnccatgg ttttcagtat tcccttaaat actaagctaa aagagaaggc
64081 tttcccttc ttttagtgtc aaagccacag tatagcatgg tagcctctgg ttatggtcat
64141 gagtcctaag gcagaaaaca aggccttggg cagaacaaag gccctggggc ataggtaaaa
64201 aaattttta aaagttgatg ggaaatcctc tacctaagaa gacagacgtc tggtgtttgg
64261 cacagtattg gcccaggagg tgattaacaa ccgcttctga acaaatgtgg agctagaaag
64321 aatttcagct tttatgggtc accctctccc tgctctgctt ccagccttac ccttttattt
64381 gttcttttgg gaccatcatt attcctaaaa atatgagggc atttttaaaa agtctattat
64441 ttggtaggga aaagagatca gtgggttggc agcaacttct gagctttgcc tcatcctcat
64501 cggctggtgc aggggaggcc ttggtgctgt tcctttcatt tcacaggaga ccccaagagc
64561 atgaaaatct gtctcccgag accgccacct tctcccttcc cggggttggg gggcctcttc
64621 cacatcccca cttccctcag caccctggag caactctgcc tctgagggcc atggcgttgt
64681 tctctgagac agtcaggttt aactctgcct ctgaaggtca tggctgtgtt ctctgagata
64741 ggtttaactc tgcctctgaa ggtcatggct gtgttctctg agacagtcag gtttaactct
64801 gcctctgaag gtcatggcta tgttctctga gacagtcagg tttaactcag gttccttcca
64861 gtgtcagggt ttagggtctg gaatggatga tctaaaggtt acacacacaa atctttctgg
64921 aagatccctg gccatgaggt tcaaatcttg cttctgtcca gctgagtttt taattgatca
64981 atacatctgt ttggcttgga ttatttttat ctcctgagga actgtgagac ctcatgcagg
65041 tagatgtcag agactcctga cacaatctta gctatttcca aaacctgaga gagggttctt
65101 ggcttggagt gtcttcacgt taaagggcag tggctgaggg agcagtgtct ggggacatgt
65161 gagatgggtc tgcaaggtag gcaggaagga ccgtggctta ccaggaaac aataaaggtn
65221 caggggnat ttctgacatt cccctagga caagaaggga catagcatgc tgggatacaa
65281 aaatgaggaa agaagcgaaa agttcgatag cctcaaaaat taaaccttca aaaccatggt
65341 ccacccctc tccttacccc ttcttcaaat gataagggaa tatacctgaa attaatgact
65401 acaattcaca tctaattgca actggaattc tagtgaccac tgctctcaca tttccccnaa
```

FIGURE 3 (continued)

```
65461 agaccagaac actgacttgg tggtatgggg gtgggaaaga tggtattctc atcactttca
65521 gttaaattat gaacattcag aaagctgcaa agtactcgca gcattaattt ctgtacagtt
65581 tgagatacag attgtactta gacttgattt ctttcaaatt gcaaatgtca gtgctctgtg
65641 aaggacaacc aagttccaaa tggggcagag gaggatttca ggggcctggt aaaagctagt
65701 gagtgacaca ggctatcagc taccaggatt gcagaaagga gttgggggtga cagggactta
65761 cgttcatttt cctgcgacac cgagagaggt tgaggaggag agacaccttt agttcccgga
65821 aagtttttcaa gtcctcacca aaccctctc tagggaactt cttcagggcg tactggtagc
65881 gctgggcagc ttcctttact ttacctttct aatgggagca caagatggcg aaacacacag
65941 ttggtctgct gaacagctga ggaagtgtgg tccccactcc cttcttcttc tcagcagctg
66001 ttactaaggg ctaaccctcc caaacgccag cctagagagg agttctggcc ctgatggtga
66061 gggcagaagg gtctagtctt ttctatagga aactcacctg gcaggaaagg caaggttgag
66121 gggatccca agatacaagc cagggagcaa agccttggca aatggaaggc cctggaccct
66181 gacttcccaa ctggattcca aagaggctga ccatgctcat ttcaaagttc ctttgctctc
66241 tataacacat atgacttcct aaccccaagc actccaaagt tattacttcc tccttaattt
66301 ctggcttgtc tggagaactg ttttttttggt ctgacgctcc acctggccag ccctctagaa
66361 gtcactctct tcctcatgaa ggatgtggga gctaaagcag tctagcagtt gcttccctaa
66421 tctcatggca taaaataata ccaatcagtg ttccccattt ttggaaaggc atggagtagg
66481 gtggcagtag aaaagtgaag tttagagttt gtgattccat ctgatgttgc aggagggatt
66541 atccaagagg aagtaaatct atgaccaatt tagagatctg gccacagcga ccttgaactt
66601 ttcttccact ttgtatctga aaatctataa gctgagacca gaaagatgca ggcggcatct
66661 cccacccctt tagctgatct ttatccactc tattccttct ctatagttac aactccacag
66721 ggatcccagt cttttactttt tcccttagca ccattcacta aggagagatt tggagtcttt
66781 caaggtagaa ttctgagggg aacaataatg gcactgcata ttttcattaa gaggactcct
66841 cgcctcagaa taccagaagt tatgcnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
66901 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
66961 nnnnnttttt ttttttttttt ttttttttttt ttttttgtatt ttagtagaga cggggtttca
67021 ccgtgttacc caggctggtc gcgaactcct gagctcaggt aatccgcccg cctcggcctc
67081 ccaaagtcct gggattacag gcgtgacacc gcgcccggcc agttttactc ttcttaaatc
67141 tgatgttcat ggcataaagc aggagtagtg gctttaaata tcactagcca cagctttcag
67201 ttgctctgat cgctatcatt cacaactttg agtaaaagga agaaagaaaa ttcttccaac
67261 tgacttattc aactttcaaa aatgagtttg ttgcaatgcc agtttaaaag ctcccctact
67321 acaccgtgct tctataaagg attctcaaat tgatgtatgt ccagcaagac ttactactaa
67381 aggtcacaca actgtactag cacgaaacaa gccaagagat aaggccctgt catccttctg
67441 tgttcaggaa acaacggcgg gatcatgcca caggccaaga tttccaaaga gattgcttta
67501 gagagaatgg atatcaggaa gcaagagcaa cagtaattct ggcagaaggg ctaggatcca
67561 tgagtacccg gggggggtng ggagtagggg gcggggaagc ttgtacaata gatcgtctta
67621 atagaaatct agtgtggcca ggagtgcacg accaccaata gaagcgcctg catttttcctt
67681 cacagctatc actctctctt cccttccccg cccaccaacg aaagcaatgc ggcaggagtg
67741 gagagcacgg gatgaataaa tggagtatct ttggggcgta aacccggttt taagacctgt
67801 ttccaccccg aaatagctgc ctgacccagg caagtcacaa aaccgtgcct cagtttcccc
67861 actacactgc cgactacaca agaatgctgc ctggattaaa ggagacagac aacgagtacg
67921 aaaccttcag cacagggcca gacagaggaa ccgctccgtg gccctagggc gagtccgcaa
67981 gagggttctg aggcctgggc tccggcccgg aaangggcgc tcccgggggcc cgctccccgc
68041 cagctgggtt ccgagcccct gcccggccca ccttgttgtt gtactcctcc acgaagctgc
68101 ccagcgccaa gcgaaagcgc ttnatcgggc cgcacactcc agttcatcgc gtagactgtc
68161 cagggcgctt catacttgta gatctccttc cgtttgccgt gcagggacat ggtggccacg
68221 gggncgcagt nacgggccgg gtcaacagtg ggctgcggcg ggcggggagn cgagcctgag
68281 atctatgggt ccgaagggag gagaggaggg ggcgggcagg aacggcctaa cccggaagcg
68341 gggatgcggc gacaaacaac gacgacggcc gagcccgacc cctagtttca aaccagcttg
68401 ggaacggacg acaaccacct tccgttttgg gacgccgccc cgccctctcg gaacggaagc
68461 cgccggaccc ccgcagcggc accggccgtt ggttgcctga cacgtccttt cgaaaggatt
68521 ctttcttgtc attggttatt gcggccgtag cgtctgaaat ctcctcgcta ttgggttaaa
```

# FIGURE 3 (continued)

```
68581 tgtttgtcat tgcaactact cgccccgccc aactctcgga ggcaggcgct ttggcagccc
68641 caaaggtcat tggttggcca agatgtcagt caggcagata acggctcagt gcgggtggtg
68701 ggggcgtggg tggcctggag gcgagcgtgc tgtagcagcg ggcctccaag ttctaggcca
68761 agtctctgag agtgaaaccg tctgtgacct gcgctgactt cccctccgct gctgctgttc
68821 tgagcggcct ctccacgctg tcgagtaaaa gtacaattct gccttagtgg aagacctact
68881 gactttcgcg ggacagagcc ctgcggcctg gcagncctgg cctgcgccca acgggtacca
68941 ccttcccgcc ccatctcttc ccagggccct tttaacccga aagctgctct ctccgtgcct
69001 cagggacagg cttcgggcgc gcagatgcgc tcagggccag gccagcttga gtcaggccct
69061 cccgcgcttt cctgcaggat ctagaaatgt ccccgaattc tggggtaggc accgacccga
69121 ccagcttggc tctgtttttg tcagttccca tcctgtaccc ttcccgccgt ggatcccaac
69181 gcdaatgcta atccagcccc aaaggtatct gtgcctgtga gttggaaaag gggaagggcc
69241 agagaccaaa tgacaccttt atataaatta tttccaattc tcagctttca tcaaaattga
69301 aggaggtttg tattgaattg ttggatgata acatntaaat actttttttt tttttttna
69361 aagacagggt cttgccctgt cacccaggct ggagtgcact ggtgtgataa gggctcactg
69421 tagcctggac tgcctaggtt caaacgattc ccccacttta gcctctggag tagctggaac
69481 cacagacatt tgccaccaca cctagctatt tttaaattat tatttgtaga gatgagatct
69541 ctccatgttg cccaggctga tctcgaactc ctgggctcaa gcgatcctcc cacatcagca
69601 tcctaaagta ctgggattac aggcttgagc caccattctg ggcactaaat ataattttta
69661 atgataaatg attttttccac ctcccaggtt caagtgattc tcctgcttca gcctcccgag
69721 tagctgagat tacaggggtg caccaccaca gccagctaat ttttgtattt ttagtagaga
69781 tggggtttca ccatgttggc cattctggtg tcgaactGct gacctcaaat gatcttccag
69841 cctcggcctc ccaaagtgtt gggattacag gcgtgagcca ccgcatctgg ccaagaaatc
69901 ctcttttttt tttaatttta ttttattttt gagatggagt ctcactctgt cgcccgggct
69961 gtagtgcagt ggcactatct cggctcactg caacctctgc ctttagggtt caagtgattc
70021 tcttgcttca gcctcctgag tagctgggat tacaggcgcc cgccaccatg cccagctaaa
70081 ggaaatcccc tgtaaggagg aaagtttaaa aacaaattta aaaaggaaag aaaaagacgt
70141 acaaaattcg cggtacctgt cttattctaa taaaaaatat gatatttatc cacagatata
70201 ggaactaacg gggggagaaa attttctctt ttatgacgta tatttccaaa aaaaatttta
70261 gtttttatta gaaaattgaa tatatattta tgttgttttg aacaactgta ctactaatag
70321 atgtaaccct taaagcctta ttaaggttac aaaaattaat tttaaaatgt caattaattt
70381 atacacattc gttttgaggc agggtcttgc tctgttatcc aggtggtggt gcagtggggc
70441 aaacagtgct tattgcagcc ttgacctccc gggctcaagc aatcctcctg cctcctttat
70501 tttttgtaga gacaagatct tgctatgttg cccaggctgg gttcaactgg tcctcccacc
70561 tcagcctccc aaaatgctgg gattataggc atgagccacc ccatgaccga cctacttttt
70621 ttttgaaacg gagtcttgct ctgttgccca cgctggagtg cagtggcacg atcttggctc
70681 actacaagct ccacctcctg ggttcacgcc attctcctgc ctcagcctcc cgagtagctg
70741 ggactacagc acctgccacc acgcctggct atnnnnnnnn nnnnnnnnnn nnnnnnnnnn
70801 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
70861 nnnnnnnnnn nntgggttgt nttttcattt tctttctttt ttttttgag agggagtttt
70921 gctnttgttg cccaggcagg agtgaagtgg aacaatttgg gttnaaaaaa atttttgcct
70981 ccccggttca aggcaatccc ctcccccacc ccccgagta gctgggataa aaggaatgaa
71041 ccacaacgcc tggctaattt ttgtattttt agtagagatg gggttctcc atattggcca
71101 gcctggtctc gaactcccga cctcaggcga tctacccacc tcggcttccc aaagtgctgg
71161 gattacaggt gtgagccact gtgcctggcc gtcttttcat tttcttgatg gtgtcattga
71221 agcacaaaag ttttaaattt tgatgaagac caatttatct gtttttttctt tcatcactta
71281 tgcttttggt gtcatatcta agaaaccatt gactaatcca aggtcacaaa gatttattgc
71341 ctatgttttc ttctaaaagt tttatgattt tagttcttac atcaaggtct attttaagtc
71401 ttttgttttg ttttttgttt tttgttttga cagggtct tactctgtca cccaggctgg
71461 agtgcagagg cacaatcatg gctcactgca gcctcaacct cttggcctca agcaatcctc
71521 ccacttcagc ctcccaagta gctggtatta tagacatgcg caaccatgcc cagctaattt
71581 ttttgtagag atagggtttc accatattgc ccagactggt ctcaaactcc taagctccag
71641 tgatccgccc acctcagctt cccaaagttc tgggattata ggcatgagcc actgcaccca
```

# FIGURE 3 (continued)

```
71701 gccccaaatt ttgtatatgg tattagaaag gggtccaact tcattctttt acatgtggaa
71761 atccaattgc cccagcacca tttgttaaaa atattttctt tcccatttaa ttgtcctagt
71821 gttcttgtca aaaacaattg aacataattg tatgggttca tttctggact ctcaattcta
71881 ttccattgtt gagcatattt ttaagggctg tttttctctc ctgtggtaac tggtgacctg
71941 tacttcctgg aagagagatg aaaagattcc caagccaact gagttacctc acgtgggtca
72001 ggtctctgtg gctctctgca ctggcctatt cataatgata tcctcctgca ggatttgagc
72061 cttctccttt gttgtgacgg cagccgagga ggtggctgac tgcccagaca gccttatctc
72121 tttcctacct ttcaaggtta ttgtaaatac caaattagat tgtttataca caagaattta
72181 gcactaaagc actatacaaa tgtaagctat ttatttctat ttatccttct ccttcatgaa
72241 taagaccccta aaaatagaag atatttttaa tttttactca ctgggctcaa ggttgcagtg
72301 tctgtattat tgcaaattcc aaattaatga agtctggctc ttcttatatt attcctgcaa
72361 aaggctgtgt gctcaccccc cggagtgtga atacgagtgt gggtcatttc ctctttcctc
72421 tgcacccttc cttcgatgag gttttgccct gtgctaggca ccatgctaaa ctctgagaaa
72481 accacagaga acaaggcaga cgccatccct gccctccagt aacatacaat ttagtgatga
72541 agctggggga tttaacaagc cattctaata aagcgttaca gtgagggagg tgcagggtga
72601 tgcctccagc agccctggtg tcagctgctc caggtccagg ggaagacttc cattatcttc
72661 caaccctgtc ggaagtggag gcggaggctg tttattgctg acacagtncc ctaacccagg
72721 gtctatagac attgtggaaa tgccttggag tcagacggga gaatgaacca gcagaagcaa
72781 tgcccgccct ccaccctcct gaagagggtt ctcaggaact ctttggaggc gaggccagcc
72841 tctggntgna gnggcctctg gatacaggtt aggcctcagg ctcttctcct ctctactcat
72901 ctctcctccc ttnggcccct ccttcagagg ctgacagagc cccactctca tctcttcccc
72961 acccaagcct ctttccacag aaagactgct tcctcccagg agacagcagc tcatttgcac
73021 acagacaccc acagccctca aagcctggaa ggccaagctg ttaggacccc tgagagcagg
73081 gtggctcctg ggaggagagc ccaggccacc accttgccct ccctggcccc tggccttncg
73141 atggggctgc tctgatcaca aacgtccacc aacgtagccg cccagaagt gcacccatgt
73201 cctctggtat ccactggctc tccaagccaa actgggcagg gaggagttgt gagggaaaac
73261 tgcaggtcag gagggaggct ggcaaagcgg gccagggcca ggcctgaccc cagctctcct
73321 ctcccggccc cactgccggc cagtgtttaa caaggccctg ccttctccct ctagtgctag
73381 ggacagccac cttcttcctc tccccaccgc ccctctccc ctgcaacacg tcatctgaca
73441 agtcagtgcg atctcactgg aggtgcatct cacaggaacg cggggtcaca gcctcctgca
73501 cacactccat gctgcacagc aaggtgcacg tgtccctcag agccccagac accatccccc
73561 actcacccag aagcccaagt gattcccaac agcccccagc agcctaatgg gttggggtct
73621 tgggagcagc tgtccctggc tccttccctg atcccaccgc ccagcctcac cccacggttc
73681 ctccattgcc ccacctccca ctgcgccgcc gggcctctgc caggtcaag gggcttcccc
73741 cctctggcag cagacgccat ggtgccgagg tggcctccac aaccgccctg tgcgccaata
73801 ggacaagacn tgtcctccct cccccacact tgtcactttg agggacacgt ggatgagaca
73861 ggaaaacaca ggggagtgtg gagacctgag gtgacttgga gcaagcctct caacctgagc
73921 ggcaatttct tcatctgtaa aatngagggg gttgttctca tctctgaggc tttgtgtcgc
73981 tctcaaagcc tgctagcctc gggttctagg actctgttgg gatcgtgtgt gatgtttct
74041 gctgagcgac tggcagcctg tgtcctcggg gggaaagagg gcaggcgctc caaagctcct
74101 gcgctctgtg gctcccctc cctcgcagcc ccaagcccca ggtgtgccgg ccgccctgag
74161 ccctccagc acctcccgga ggcgcctgca agacacctaa ggtccccgcc tccctcctct
74221 ccccccgcc acacccctac ccccggcagg cgacgtcccc gccctcgac catggcctgg
74281 tgaagaagcc ggccaggccc gatcagcccc aacccgccg cacgagcggc gnctgncgga
74341 cagctcctgg ggccccggcc ttgtcactcc ggaggcggga ggctccgggg ggtcgggctg
74401 ggaagatcga gccggaggcc gctaggctnc ccaggccccg gccganggct gcgcggccgc
74461 acggtgggca ggctcgggtg nttccggcaa actgccgggt ccccatctt caaaagagag
74521 gaggcccttt ctccagcttc ctctgcggga gcccgaccca gccccatccc gccaccccg
74581 ggctgcacct cggcccntc ncnccggcnc ncgcgcccct gcccgggggcg ggccagngaa
74641 ncctcggccc gcgccgctng gggactttgg agcggaggag gaagcgcggc ggggcggggg
74701 cggggtgtg tcgggtttta ntaacccgca gggcggccgc ggcgcaggag aagggcagga
74761 gccgagcacc gcgcaccgcg tcatggggg cgcctcgggc cgccgggggc cggggctgct
```

FIGURE 3 (continued)

```
74821 gctgccgctg ccgctgctgt tgctgctngc cgccgcagcc cgccctggcg ttgngnaccc
74881 cgggctgcag cccngaaact tttctngctg acgaggccgg ggcgcagctc ttcgcgcaga
74941 gctacaactc cagcgccgaa caggtgctgt tccnagagcg tggccgccag ctgggcgcac
75001 gacaccaaca tcaccgcgga gaatgncnaa ggccaggtgg cgcccgggcc cgggcggggg
75061 cggggcgggc cgcggcggcc aatcacagca cgcggccggc ttgtggggnc gggcagnntg
75121 gcgcccccgn acccgaaccc caccccgacc ccggaccctc gccccgacag tcagccgcgg
75181 ggcccgagcg ccgggctgcg cgcacggcct gcgctcccag catgcacgag ttggatggat
75241 gagggtggct gctcccaggc cgcgcccgcc ttcgccgaag gtgctgggct tggctctggg
75301 gcccccgcgc tctcgggcag ctgccttctc acctccggac gctgtcgctg tcaccgtcac
75361 cgcactgcac tgtccatcca ccctccactc gcccggcctc ttttctggtc ccaatttctg
75421 ctccaccatt cccatgaggc agattccctn ccagaaggag gaagcgcggc ttccgcnaaa
75481 ctaaggtctc ccgcagggat nctccccagg gcccgggctc tggaagccct tggccttcct
75541 cccctccccc agcaccgtgg cttctccttt atggcctgca tctanagcag ggtcctacac
75601 cctccctgcc ctcctggtgc ccaataggag gaagcagccc tgctcagcca ggagttntgc
75661 nggaggcctn ggggcagnaa ggccaangga gctgtatgaa ccgatctggc agaacttcac
75721 ggnaccncgc angctgcgca ggatcatcgg agctgtgcgc accctgggct ctgccaacnc
75781 tgccctggc taagcggcag canggntggg ctgagggctg aggcagagct cggggcggc
75841 ctcctagtgc cccatcgtgg gggtcggggg agagcagccc atcangggag ggaggaaccc
75901 tgggatccac atgggcccnt gacagaaggg naaagcccag gtaagcacag aatggctttc
75961 tgagncattg attttcttg gagatgggt ggggagttac tttctgttaa aggaagcatt
76021 cntggagtag gaagccaaat tcaaatacac ttctccctag gctggtttat gagcttcttt
76081 ggaagagttg agaagggctg ggcgtggtgg ctcaagcctg taatcccagc actttgggag
76141 gctgaggtgg gcgcatcgct tgagcccagg agttcaagac cagcctggcc aacatggcaa
76201 aacctcgtct ctacaaaaaa aaaatagctg ggcttggtgg tgcgtgcacc tacagtccca
76261 gctactcttg aaactgaggg ggaaggatca cctgagccca ggaggtcaag gctacagtga
76321 gctgtgattg cactactgca ccccagcctg cgtgacagag tgagacctcc ccccaaaaaa
76381 aagagagaga gaaaaggttg agaaagactg ggaagtcacc aaagccagag aatgggaggg
76441 atctgccctc actgcagggt ggtgccaagc tgggacttga ccctgaccct gactttcagg
76501 actcctgtcc cccactccac aggctgcctc cactggcagg ggactcagaa gtgatccggt
76561 cacactaagt gacacttagt gatcagaagt gccccggtgc cactgagtgg ccttgtccaa
76621 gctacatcca ctctgtgggc tcctccttgt agcagcgagg ggagggcaga tgtcccaggg
76681 gctggtcact ggagcattcc tcccctctga ctcccagta caacgccctg ctaagcaaca
76741 tgagcaggat ctactccacc gccaaggtct gcctccccaa caagactgcc acctgctggt
76801 ccctggaccc aggtacggcc cttgcagctc ccctctcggc ggtgccctag tgttcccaca
76861 ttgccctgct gcactccgga ccatgcagtt gtgtagggtc tgtggagaca gcaggtaaac
76921 ccaaaggtgt tgccctccaa ctggggctgg acggtgcaga tanccccac gccctgcttc
76981 tcttggcaag tggacttccg gaatctccag ctgcagcccc cacttctgtg tgtacctcgg
77041 cctctcccat cacccctagg ccttcctcct ggctgcctgg tttccccttt cgtgggtcct
77101 ctcatgttcc ccaagagccc tcaggccagg gaccctcgt ggcttcccct taaaccccgc
77161 tccagccccc tttatgagca gcttcgagga aggcactcca tccaataggc cgctaagtgt
77221 ctgtctgggt tttggccttt gggtgtcccc ttggtgtcag ccacttagg tggtcatgtc
77281 tctggggcag gggccctgcc tggngtgttt ctgtagctcc agcccccctc ccaccaggcc
77341 tgtaggtggc ccctgtctct gggggcaccg tgatgttcag gaagctggtg ggagcagtaa
77401 ggactggtgc aggctctggt gaaggccgnt tgaagacttc aacgtggagg cctcctcacc
77461 gaccctgcct gcctgtgtct cagatctcac caacatcctg gcttcctcgc gaactacgnc
77521 catgctcctg tttgcctggg agggctggca caatgctgcg ggcatcccgc tgaaaccgct
77581 gtacgaggat ttcactgccc tcagcaatga agcctacaag caggacggtg agcaggcctc
77641 tccctgtcca ggaaccacgc caggtgtcct ctctcagctg tctccccaga gtcccagccc
77701 agagtcaggc agagcagctg gtatgacaat tccagcaggc cctgagtttc ccagaaagtg
77761 gaggtgggac cggcctgcac ccagtgtgcc tggactttgc tgctggcctg ccccacgtgg
77821 ccatcctgct gtcactcctg gccctgatgc tcctctttgc ctctgggaac ctccaggatc
77881 tgtttagctg gctgtagcta attagaaatt gtagagtggc aacccccaag ccaatttttcc
```

FIGURE 3 (continued)

```
77941  agctagctgc  agatccacgg  gcctcgagcc  agtggaagag  ccgacttaca  gctgagaggc
78001  tgaggtccga  gcctttggcc  tgagctacat  acctcacccc  cacgccccca  ggcttcacag
78061  acacgggggc  ctactggcgc  tcctggtaca  actcccccac  cttcgaggac  gatctggaac
78121  acctctacca  acagctagag  cccctctacc  tgaacctcca  tgccttcgtc  cgccgcgcac
78181  tgcatcgccg  atacggagac  agatacatca  acctcagggg  acccatccct  gctcatctgc
78241  tgggtaagga  cctggcctcg  cctccacatg  agtcccacgg  aagtgtgggt  cccgaggtag
78301  gggtggggga  tgtccagggt  aagggaaggt  gggttgtgac  cctcacatct  cacatgtgtg
78361  gggcatcata  ctgtttgctt  cacatgcagg  agaccattcg  tgttcccact  ttacaggtgg
78421  ggaccctgag  gcttagggtc  gtgagggact  tagtggtcag  agagctaggg  gccaaaccaa
78481  aggctctggc  cctgggtcca  gtgggggagc  catcagccta  gctcatgccc  naaggaaaca
78541  agcactgtgg  ccctgcctca  ggattgagtg  gctggggcct  ggcacagcca  gaaatgacag
78601  tggcagcatc  ttgcagcccc  aggacatgtg  gccctcggag  gagtgtgggt  gggactgatg
78661  tgtgagattt  ctggccctaa  gccaggcctg  ncagcccttg  agggccccag  ggtacaggtg
78721  ccggccccag  ggtgccactc  agcgatgcat  gaagaagnca  ggcacagcca  ggcagggagc
78781  caagctgtcc  ccttccttcc  ttatctagga  gacatgtggg  cccagagctg  ggaaaacatc
78841  tacgacatgg  tggtgccttt  cccagacaag  cccaacctcg  atgtcaccag  tactatgctg
78901  cagcaggtaa  gctctgggct  caagcctngg  ggtggtgggg  gtcgggggtg  gggcgcaaaa
78961  aaagggagtc  acagatgggc  acaggggcgg  gaaggtttcg  ggtactgagc  agcagcctgg
79021  tgtgtctgta  ggagcagtga  gctggggtcg  gccccctcag  tgaggtgcca  gctcctcct
79081  ccaggctcca  cagtggcagg  atgagagcaa  caacgcactt  tcactcatct  gctgtgggag
79141  tgagggccct  gcctctggga  atggtggcca  cagagcagag  aagctttcat  gcacagggag
79201  ttgacccgag  atggggaccc  cagccctgtc  cccaggccag  ccagagtggg  ctcccccctga
79261  cctggctcca  caccctcct  ccagggctgg  aacgccacgc  acatgttccg  ggtggcagag
79321  gagttcttca  cctccctgga  gctctcccc  atgcctcccg  agttctggga  agggtcgatg
79381  ctggagaagc  cggccgacgg  gcgggaagtg  gtgtgccacg  cctcggcttg  ggacttctac
79441  aacaggaaag  acttcaggtt  cagacatggg  aagagcacgt  tctggggttc  cccggttctg
79501  gggcccgggg  aaaggcaggc  agcccaggcg  cagggaagct  ggttcccagg  cctgcctcta
79561  ccctacccca  gcactggttg  gaggctgggt  ctgttccagg  gctaggggt  ataggaggcc
79621  tattagtcca  ccttctctgg  cagctttgac  aaatagtcac  ttctatacct  tggaatggag
79681  gaagaaggcc  caagtggtgg  tgagccaggg  cagggtaaag  aatttgcttg  tttctgccag
79741  gcacggtggt  cacacctgta  atcccagcac  tttgggaggt  caaggcgggt  ggatcacctg
79801  aggccaggag  ttcgagacca  gncctggcca  acatggcgaa  accccgtctc  tactaaaaat
79861  acaaaaataa  attagccagg  ggtgatggcg  ggcgcctgta  atcccagcta  ctcaggaggc
79921  tgaggcagga  gaatctcttg  aacccgggag  gcggaggttg  cagtgagctg  agattgtgcc
79981  actgcaggcc  agcctgtgca  aaagagtgag  acgctgtctc  aaaaaaaaaa  aaagaaaaaa
80041  agaagttact  tgtttctact  gcggcttcat  gccccagggc  agctccctcc  tcattcctgt
80101  ctttcaggtg  ccaatctgcc  ctgtgccctg  gccctgccct  gttctgtcca  tccgtcactc
80161  tcaccctcgc  cctctctacg  ccccaggatc  aagcagtgca  cacgggtcac  gatggaccag
80221  ctctccacag  tgcaccatga  gatgggccat  atacagtact  acctgcagta  caaggatctg
80281  cccgtctccc  tgcgtcgggg  ggccaacccc  ggcttccatg  aggccattgg  ggacgtgctg
80341  gcgctctcgg  tctccactcc  tgaacatctg  cacaaaatcg  gcctgctgga  ccgtgtcacc
80401  aatgacacgg  gtatgggagg  gctgagaggc  ccccacccag  cctcacctaa  accccgctcc
80461  accccacagc  aggacctcac  ttgccccact  cagctctgcc  cttctttctg  cctccccggcc
80521  ccaggtcagg  cagggttcgg  gatcctccta  gagcctcacg  gtgcacactg  cgcccagctc
80581  agcacacctg  ggggtcctct  tccaagcagg  gccagggtc  tcgagggcca  gccatacctt
80641  ctctgcatct  ccctggcctc  actttctgct  gccccgccag  cccacactct  tagggaccc
80701  tcttctccct  ctgacctctt  ccctctcctt  tcatctcatc  tcccaacaga  aagtgacatc
80761  aattacttgc  taaaaatggc  actggaaaaa  attgccttcc  tgccctttgg  ctacttggtg
80821  gaccagtggc  gctggggggt  ctttagtggg  cgtacccccc  cttcccgcta  caacttcgac
80881  tggtggtatc  ttcggtgaga  ggagggatag  aaaagccttc  gccccagcta  gccctcccca
80941  gcctcctgga  cagccaggcg  cctcctgccc  cagccagttc  tagcctctcc  tctctaatga
81001  tgtccccgc  tgtgacccac  cgccttctcc  tttcctgcct  gaaactccct  cttccaggaa
```

FIGURE 3 (continued)

```
81061 gtcttcccca gttcctcagg atggggaagg gttgccgggt ggaaatgcct tttctacaaa
81121 agctaaatcc atctgtttgc aacctctagg ccctaagaca atttaaccat ccttttccag
81181 aaccaagtat caggggatct gtcctcctgt tacccgaaac gaaacccact ttgatgctgg
81241 agctaagttt catgttccaa atgtgacacc atacatcagg tattagcgcc cccaccccac
81301 ccaccccccag tactgtcaca ccctcaatcc acttctcctc ctgtgttcct agctgcctca
81361 tccccagggc ttgtcctcat gctcctccag acctcaaagg cctggagtta gagtggccca
81421 ctctcctgag cctgtcttgg gtctcccttc tcccccaaga tagcttctgg tccagcctct
81481 gccctgcagg aagctggatg gtgcctgggt aaggaacccc tgttcctggc cccccatgat
81541 cttccctgac tcccaccctg tgcctgcagg tactttgtga gttttgtcct gcagttccag
81601 ttccatgaag ccctgtgcaa ggaggcaggc tatgagggcc cactgcacca gtgtgacatc
81661 taccggtcca ccaaggcagg ggccaagctc cggtgtgtgg tgggaagccg ggggaagtgg
81721 gaggcagaga ggagcggctg gcaaagggtg tggcaggagg tgtctggctg ctctgatggg
81781 gtggggggca ccaaccacag agctggactg atgtggatgc ctgtctcctc gctatgtcat
81841 caaatattta ttgagtgggc cttctggctg gcantggggc gacacaaatg ccccctgcca
81901 ccatcagaga gatcccaggc cccagggtct tattgccaca gtttctgcag tccattgngg
81961 gggcggaagt ggccaggggc atgtgggccg gggtccagga gcagactcca gcctgagtcc
82021 cctgtgccca tggtacccac tctgcccacc aggaaggtgc tgcaggctgg ctcctccagg
82081 ccctggcagg aggtgctgaa ggacatggtc ggcttagatg ccctggatgc ccagccgctg
82141 ctcaagtact tccagccagt cacccagtgg ctgcaggagc agaaccagca gaacggcgag
82201 gtcctgggct ggcccgagta ccagtggcac ccgccgttgc ctgacaacta cccggagggc
82261 atnaggtaaa gccctgagtg aggatggtgt ggggctaagg tgggtcctca anctctgggc
82321 ttggcccagg nccccaggtt cctggtcagc tcctaccagc tgagccctgg taccctgtcc
82381 tggagggcca ggcagccccc caagctcatc agcagggcct gcgagtgggg acaggcatgt
82441 ctttccccca gcatcctaga gagggtgtgc tcagacctga gggcccctcc ccttccagag
82501 gaagccagac acaaggctct gtgaggtcac nactgcggcc tccgctcttn nnattggcca
82561 ggggacggta gctgcaggac tctgctctcc tgcggccatg ggccagggnt tgggctactg
82621 caggacttcc cagcctcctc ttcctgctgc tctgctacgg gcaccntct gctggtcccc
82681 agccaggagg catcccaaca ggtgacagtc acccatggga caagcagcca ggcaacaacc
82741 agcagccaga caaccaccca ccaggcgacg gcccaccaga catcagccca gagcccaagt
82801 gggaccatgc aggggagggg cagggtgcca ggggtgggag aggcgggggcc gggntaggga
82861 caggcaggg tacaagggag tgcgagaggg ataatggctt ctggtgagac cacaaacctg
82921 gagaggggag gcagaggttt gtctgtttcc ctgcactctg tcccacagac ctggtgactg
82981 atgaggctga ggccagcaag tttgtggagg aatatgaccg gacatcccag gtggtgtgga
83041 acgagtatgc cgaggccaac tggaactaca acaccaacat caccacagag accagcaaga
83101 ttctggtggg agccacctcc ccacccccaa acctgagcat gtgcatacac acagagatgc
83161 tgtcccgctc accacacagt ggggctgcca ccacatttta aattgaatat ttaaaacaat
83221 actcaatttc gggccgggcg cgggtgntca cgcctgtaat cccagcactt tgggaggggg
83281 aggcgggcgg atcacgaggt cagnnnatca agaccatcct ggctaacacg gtgaaacccc
83341 atctctagta aaaatacaaa aattagccgg gtgtggtggc gagcacctgt agtcccagta
83401 ctcaggaggc tgaggcagga gaatggcatg aacccgggag gcagagcttg cagtgagccg
83461 agatggcacc actgcactcc agcctgggcg acagagcgag actccatcaa aaaaaaaaa
83521 aaaaaaaact caatttcaga ttttgatgaa catttactca atgcctgagc aattcttctt
83581 tccttaaaaa tcagtctctg ggaggcctag gtgggaggat cacttgaagc caggagttgg
83641 agactagcct gggcaacata gcaagatccc atctctattc aaacaaacaa ataaacaaaa
83701 atcaatctct agtaacagaa taatttgtac ataaataagt ggtgctcaag tcgtttttta
83761 aaagattgaa agcctctgtt tgtctcctct acaaaagggg ctacacttcc tctttaccct
83821 cattccctgc ctatttggct gagcacaaat tatgccactg agccacacac tgttactgtt
83881 ccttggcact ttgatctgtt gcctcatctt tttctcaaca gccttgcaaa attggtgagc
83941 ttattcccat tttacagatg ggatttgata ttaactctga ggttcagaaa ggccacagag
84001 ctaataccaa gctggctcct tcnctaaggg cctttaagac acttgggggt cttctcttct
84061 ctgcccctgc ctggatatgt gttgcttgac cgcaggcatc cagggagggt gagtactgca
84121 tccaggacgt tatcagcgtc cagcttgcag agagtcttat aggcaaaggt tgcaacttaa
```

FIGURE 3 (continued)

```
84181 ttccactgcc ccctcaccac cacctccagc cctcagctcc cacttggggc ctcccgctca
84241 gaggctgctc tggagctcct gggccctgtg acaccatccc cctgtgccct cagctgcaga
84301 agaacatgca aatagccaac cacaccctga agtacggcac ccaggccagg aagtttgatg
84361 tgaaccagtt gcagaacacc actatcaagc ggatcataaa gaaggttcag gacctagaac
84421 gggcagcact gcctgcccag gagctggagg aggtgtgtgg ctcgcaaggt acagggagag
84481 gggaatcctg gggcagtgag cccaacacag ggtctggcct ggccttcacg ctgcttcctc
84541 ttcctcgttg tatcaagtca tggcatctgc catgcgatng tgcacctcag aactgctgag
84601 agggcagcgc tccccagctc cctggctccc cacctgccag cccatggggc tnggggggtag
84661 tgcaggcccc agagagacca agtgcaaagg agtacagctc attgcctctc cttcctcctg
84721 cagtacaaca agatcctgtt ggatatggaa accacctaca gcgtggccac tgtgtgccac
84781 ccgaatggca gctgcctgca gctcgagcca ggtgagagct catgtgcagg ctgagtgaga
84841 ggcgagggct gggactggca tggggcccgg gggtgctggg tgagagcaca gagttgggtt
84901 cccctcgctc ttggggtcag cgtgcccagg aaatgccctt tcttgttttc cacgaggggg
84961 gcttctctgc cccactgaga gccggcacct acttcatacc atgccccgat cagctgcccc
85021 tccctcagaa ccgccctctg cttaagggtg tccactctct cctgtcctct ctgcatgccg
85081 cccctcagag cagcgggatc tcaaagttat atttcatggg cttggactcc aaatggggg
85141 aactcgggga cactagctcc ccccggcctc ctttcgtgac cctgcccttg acttcctcac
85201 cttctctgtc tttcctgagc ccctctccca gcatgtgact gataaggaaa ttgagtcaca
85261 cagccctga aagcgccaga ctagaacctg agcctctgat tcctctcact tccctcacct
85321 accctgccac ttcctactgg atagaagtag acagctcttg actgtcctct tttctcccca
85381 ctggctggtc cttcttaccc cggcccgttt gaaagagctc accccgaca caaggacccg
85441 cacacagata cctcccagct ccctctcaac ccacccttc cagggttgga gaacttgagg
85501 cataaacttg cttccatgag gaatctccac ccagaaatgg gtctttctgg cccccagccc
85561 agctcccaca ttagaacaat gacaaataga aggggaaatg gaaaataaac aggagaaacg
85621 gttttcccag gacagggttt ggcctacaag ttgtggatgt gggtacccat gccaagtgtg
85681 aggggaggct ggccgggtgt ggtggctcat gcctctaatc ccagcacttt gggaggccaa
85741 ggtgagtaga tcacttgagg ccgggagttt gagaccagcc tggccaacat ggtgaaaccc
85801 catctgtact aaaaatacaa aagttagctg ggcgtggtgg tagatgcctg tagtcccagc
85861 tacttgggag gctgaggcat gagaatcgct tgagcccagc ctgggcaata cagcaagacc
85921 ccgtctctac aaataaaata caaaaaatta gttggatgtg gtggtgcatg cctgtagtcc
85981 tagctgctag ggaggctgag atggaaggat tgcttgagcc tgggaggtca aggctgcagt
86041 gagccgagat ggcgccactg cactccagcc tgggcaacag agtgagaccc tgtctcagaa
86101 aaaaaaaaa aaaaaaaag gagaggagag agactcaagc acgccctca caggactgct
86161 gaggccctgc aggtgtctgc agcatgtggc cccaggccgg ggactctgta agccactgct
86221 ggagagccac tcccatcctt tctcccattt ctctagacct gctgcctata cagtcacttt
86281 tatgtggttt cgccaatttt attccagctc tgaaattctc tgagctcccc ttacaagcag
86341 aggtgagcta agggctggag ctcaaggcat tcaaacccct accagatctg acgaatgtga
86401 tggccacgtc ccggaaatat gaagacctgt tatgggcatg ggagggctgg cgagacaagg
86461 cggggagagc catcctccag ttttacccga aatacgtgga actcatcaac caggctgccc
86521 ggctcaatgg tgagtccctg ctgccaacat cactggcact tgggtccctt catttttcctc
86581 aaagaggtgc tgtgaaaccc caagcctagg aaaaggtaga tccctggagg aggcaggtaa
86641 tgtggtgttg ggagagcctg gctgtgtccc ctctgtaggc tatgtagatg caggggactc
86701 gtggaggtct atgtacgaga caccatccct ggagcaagac ctggagcggc tcttccagga
86761 gctgcagcca ctctacctca acctgcatgc ctacgtgcgc cgggccctgc accgtcacta
86821 cggggcccag cacatcaacc tggaggggcc cattcctgct cacctgctgg gtaagggcac
86881 atgtcgggcc ttgaggaggg taaagacgga ccacagtgtg agtgagggtt gggacagggc
86941 tgactagagg gtaggagca ggctggggac tgagagactc cagccctgtg ggggatggtt
87001 gcccaggctg gaggggggtg ggcgctggga gtgggagcc ccccacttgc atctggtgcc
87061 acattcactg cagatctatg tcgggcaagt caccatggat gggggaagaa gttaataatc
87121 ttgtccagga gaccacggca cccatcacaa cattgtgtga tcttagaggg cgaggaagag
87181 gctgtgagtg ggagctgggg aggctttgcc aagaggtggc ctgtgagcag ggcctcggaa
87241 gatgacaggg tttgacagat gggaagtggg ggatgagagg acagacgcag tgttcaggcc
```

FIGURE 3 (continued)

```
87301 aagggaactg gaacaaagaa gaacctgaga atgtaaatct acttcaaccc tggaccctcc
87361 tttgccaagg gctgcaatct cagatgccct gaatgtgtga agtaggcggt gaggacagta
87421 agggatggta gggagtaagg caaagcagag gctactggtt ctctgtccct gatgggctgt
87481 taggaacact ttcctggagc agagagacca gacaggccct cagaccattt agaaactata
87541 agggaggccc cagaggacgg cctggctgtg ggtctagctc ccacacaggc tgggagtcca
87601 gccctcttca gcccctctct ggtgagacca aagaacatct ggtgatgtca cagtggacgt
87661 cagttcacca actgggagac acaggncccc gggaagaaaa gcaacatgcc cagcgtggcc
87721 tgggagctgg ggcagagctg gccttagaac tcagcccctg acaattggta aaaggggaaa
87781 ggggagcaac ctaacactga tgcgctctct gtctctctct ctggctctct ccctggctct
87841 ctccctcttc tctctcatgt tctctccatc actcatcgct ctaaccctct ctcactggtt
87901 tgcactttag acttcatctg atgtcagccg aagcttcacc tcacttggct aggaaagagc
87961 cttgagtcca aatctgtttc tgagccttcc attcatcctg agtttcttcc ttttcctctg
88021 tcgtggagaa ctaggctctt ttcttacact aaactcagag gcatcagcct ctncctgaag
88081 gagacggctg gttcctgtca gagttgctga gctgcagaca ccgacctcag gtggtgcgga
88141 ggggacatgg cagagtggct ggtgaagaga gcagcctgcc agcctttcaa tcccagccct
88201 gccacttagg agccgtgggc ccccggcgag ggggcgnng tncacttaac tctccagcct
88261 gtttccttta ctagccaatg ggaatcgtga cagtacctgg gtgcagacag gattgaaagt
88321 gaattcacac aatgttcttg gtgcagagcc aataagaggt ggccaccggg gtgtaggtgt
88381 tctggggacc tgtaatgtcc tcacatgtca gcagttgcta gtcacattgg tctccactgc
88441 tcacggacag tgaagaccac ctggattccc tgataaccag caaggcccc acctagagcc
88501 aggcagtaat gacctactgg gctggatatg cacaccaaag atgatgtgtg cctcaaagct
88561 tgcaaacagt aggtgctcaa gaaatgccac tatgattagc aggactggga tctggagcgc
88621 tcttcctgca ggagggcatt gagcctaagt aacatttgtc tttcctctct ctgccgtccc
88681 ccacactcgc ctccagggaa catgtgggcg cagacctggt ccaacatcta tgacttggtg
88741 gtgcccttcc cttcagcccc ctcgatggac accacagagg ctatgctaaa gcaggtccgc
88801 accagcccag gggcagggag gncccgccgg gantgggagg gaccctctga ttcaggagtt
88861 ccctccagtt tagccctccc ccgggatccc cacggcagca cgcagtctgn tccccggaac
88921 ccccagtttg ggcagaactc cctctngctt gcagggctgg acgcnccagg aggatgttta
88981 aggaggctga tgatttcttc acctnccctg gggctgctgc ccgtgcctcc tgagttctgg
89041 aacaagtcga tgctggagaa gccaaccgac gggcgggagg tggtctgcca cgcctcggcc
89101 tgggacttct acaacggcaa ggacttccgg tacatccagc tagggctcag gtctcgttcc
89161 tgagccccac gggcnaaggg aaatgaacca agcaaagggt ccactactgt cccccagctg
89221 gagccagcag ggcaggatgg ggacagggcc agagtttggg actgagtgtc tagagaggtg
89281 ttggcttctg gcaggaaaac cccatccgcc tgatggggac ttctgaagca cgcaacagct
89341 ctgtcagcct ggccgctggg aagtgctcaa ggtcccagtc ctgggtttga gcatggtagg
89401 ctgccccgcg tccctccttg ggagcagccc ctgcatggag ctggcctctc cctgggggca
89461 catgctgtga cacagggagg cacacgagga tgttgggtgc tctgtacaga tccactctca
89521 ccctgacag gctcagaagc tgccttcctt ggaggatggc gttttagtta cctattgctg
89581 tgcaaccaag cacccagag cttagcctta cgaaacaanc cagttgannt tttgcttatg
89641 attttatgtg ccaggaattc aggcagtaca cagtggaaat ggcctttctc tacagggccc
89701 cctctgttgg gggcagctct cacagccggg atggctcaat gggggccata cgtccagagc
89761 cccagttctg gctgtcggtt gaggtcctcg gttttttccca tgtggcagat gctggggcac
89821 atgttcccag tggcctcttg gctcacatgt tgggtgcttg gggtgagatg gctggaacgg
89881 ctggaggtgg gtcaggcatc tctccaggct agctcgggcg ccctcccagc gtggaatctg
89941 aggtgggcag atttacctgg cagccagcat cccccacagc aactactgac gcagccagtt
90001 ctcaaggcta ggtccaaaac tggcccagag tcacttctgc catgtttttat tggctagaac
90061 aagtcacaag ttcacccaga ttcaagagaa gagaaaaaag tccctcccac ttgggagaag
90121 tggcaaagac catctgtcac agctgaagaa gtgtctctta caaggagaac agacacgggg
90181 agcctgaaac aaaacccgat gggattccct gggctgtgca ggccttcca ggcatgagga
90241 ctcagccaca gggctngaga nggagacagg atctgggga tgagagccct tgtggggtct
90301 tccctttat ggggagtcag aggagaagct ggatagatcc ccagccttgt ggccaggatg
90361 ctgggcagct cttccttccc cctccccgat gagaatgaca gaaaaacagg attcacctga
```

# FIGURE 3 (continued)

```
90421 gccaaaaggc ttccagttag atccaagaga gaantttccc gcagtttgaa ttggtttgct
90481 aaacaacaag gaagggctgg gtgcggtggc tcacacctgt aatctcagca ctttgggaag
90541 ccgaggcagg aggtctgctt gagctcaggg gttcgagacc atcctgggca acatagcgag
90601 accccatttc ataaaaaata aataagtaaa tgagaacaag gaaggactga cgagagacgg
90661 tagaaccttc tggtttgggc nagctctgca gctgccattc atcctggcca taagaattct
90721 tggggtgaat aagtttgtcg ctgttgggcc gcatgagatg cagaatcgcc cactctcacc
90781 cctgacagaa acagttgttt ccttcaggga gcctccatct tgggagataa agcatgtgta
90841 catgggaacc cactggccac acattctcta gaaagtacac aatgtcccag tgcctctaga
90901 gcaagcactt tgtacagtca gaaagcaaca ggtggtgggg gctggagtca ttcaggaaaa
90961 tgggaggcag aggaatggcc tgaacggccc gatgctaggg gcttctgccc ccagattccc
91021 tcttacgcac actcagtggt tgcccttccc ctccctcccc acagtgctgt gtccctgca
91081 tgctgcagtg ctggggtctg ccctgggtat agcaaggccc actgttccct tatgcccagg
91141 gcttctcact gtcctctccc aacaccctct cccccactcc actattccta ggatcaagca
91201 gtgcaccacc gtgaacttgg aggacctggt agtggcccac cacgaaatgg gccacatcca
91261 gtatttcatg cagtacaaag acttacctgt ggccttgagg gagggtgcca accccggctt
91321 ccatgaggcc attggggacg tgctagccct ctcagtgtct acgcccaagc acctgcacag
91381 tctcaacctg ctgagcagtg agggtggcag cgacggtgag agagaagcgg gaggccctgg
91441 tgggctgagg accaagaaag ggtggtgagc ttgggaggtg ggaaaggggc acttagtggc
91501 ccatgggcag aggtgtgggg cagagcaatc ggaaggaagg gagccaccca gaccatccca
91561 ggaggcaggt cacagggccc aaaaggtaca gcacccccac ccctccacca tcacaggcac
91621 accagggcca agccgctagg accctgggtc tgacagctgg gctcccttcc cttgcagagc
91681 atgacatcaa ctttctgatg aagatggccc ttgacaagat cgcctttatc cccttcagct
91741 acctcgtcga tcagtggcgc tggagggtat ttgatggaag catcaccaag gagaactata
91801 accaggagtg gtggagcctc aggttctgga acactcccac gggatgcggg ctgggggatc
91861 tctgcgagtg tctgcatgtg cctgggtgtc tggatgggcc agggtagggg agtgtgtgtg
91921 tgtgtgtaca ctattgtgtc tgtgcatatg atgtgtgtgg tgtaagtgat ggggaaaacg
91981 gggtgattgt gcacagaggc ccagcacgca ggagaatggg gtgcccagta tagccccaag
92041 tgcagggacc ctccctcaag tcaaaaatgc cacccccagc ctggttctcc ccaaactcat
92101 cttccaacat atattcccac tcgacaggct gaagtaccag ggcctctgcc ccccagtgcc
92161 caggactcaa ggtgactttg acccaggggc caagttccac attccttcta gcgtgcctta
92221 catcaggtaa cgggaaaggc aggagggcac attgtgaggg gcagtaccca cagctttgtg
92281 tttcaactgc ggccactgcc cggtccacaa gctctgtcag tcagggcaga cccggggggag
92341 ccggccgcac ggtgcaggtg cctgggccca ctcacactgc caaggctgat gggttttttc
92401 ttgaacattc ttttgatgag agtctgtacc atccaaacag ttgaacacag aaactcaacc
92461 taataattgg ctaatggtta ccagaccttg gttaagtagt taacattaac cacgactcat
92521 ggctggatca tgagctctgc actgttttgt tttgctttta aaacaagact gtgattcttt
92581 tactattatt gaacattgtc tgcgatacaa tttgaattgt acctggaagc ccttctagac
92641 actaaaatgt aggattggag atcggttaag gtgggaggca gggttgctgg ggcaagttac
92701 agtcacaggc tggggtcaga cagaactggg ttcaaactct gtctccnatt actttgtttc
92761 cttgagaaaa ttcctcaatt tctgtgagct tccatttcct gacctgtgaa ccccatttca
92821 caggatgcac gatggctaac ttcttagcat tctgtctcat acacagcctc ctcaggagg
92881 ggtggccagg accccactat tcatcactct ctagtggaat gtagctgcac actaggtctg
92941 caggtcacat ggccacagat gagtgtgccc aatgcagccc ctctccttct gtgtgccccg
93001 ggagagcact tgctgagggc tagcaaggct gtttgtgatc cgggaggctc cctgggaggc
93061 tgggggctag agagacctca ggctggagtt ccaggtgccc ccgggctaca ggtagcccag
93121 gccaccccca gagggctgtg gctgcctctg gccctggcct cccgtggttc ctggaagccc
93181 agcaagggca gggcccatgc ccaccttgcc tcctggcacc tgggatgatg ccagcacatc
93241 atcaagtgct aataactgat tgtgggatgg atgaagtctg tccccagagt ccaggaagag
93301 ggcatccctg gagcacctca gataggncct gacctagacg gtgctccaga gatgacactt
93361 aggancaggg ctcccgcctg cctgctggag tggtccctgg ggttcccagc cggcgctggc
93421 tctcacccgg gagccagctg gtgtgatggc tagcttccca gcttaatgca gacaattctc
93481 caaacagggg tgggcaaagg agacttggct gctctagaaa aacattccgg attctggcca
```

# FIGURE 3 (continued)

```
93541 gcagccttca caaagcactt ttaggaaaga ccagggaact aggtggtaca tgcttgcacc
93601 cagcattcaa agtgagaggc ctgtgccact ggctcaggac atttaaaacc tcttcagact
93661 ttaagctggg gagaatcctc cagccttgac tggcagattt ctaccaggga attcgtgatg
93721 ctttggataa gatcatgtag gactggcttc cctgcccaga ccaccctagt agatccacna
93781 cggcccattt ggccacacct tgcctctact tgcatatacc ccagggatgg agacctcact
93841 gcctccaaag ccacctgcca gatctcntga aggctctgcc ctgaccccat ggagcaggcc
93901 ctcctgagtt gtggaggcag ctctgtgggt gggaggcatc tacacaggca cggctaggaa
93961 gaggctcaga caatgctaag agctggggtg ggggagctca ccctgatagc tgtgggcaga
94021 gttggggggc cttggctctg ctgtgcgcat gtgacttagc acacatcaca tgtgatgtgc
94081 agaagggcct ggggcccagn tggcacaagg ccctcaacca actccgcccc gggccacggc
94141 ctcgctctgc tccaggtact ttgtcagctt catcatccag ttccagttcc acgaggcact
94201 gtgccaggca gctggccaca cgggcccct gcacaagtgt gacatctacc agtccaagga
94261 ggccgggcag cgcctggcgn tgagtgtcct ccagccctcc tttgtttcca tngcntctgg
94321 cctgcgcccc tgggccttga ggggtctgtc cactggagct tttgtgggaa cacttgccat
94381 tttgagccgg gaactcccac ctgcagcgtg ggccaggcct gattgccatc tccttaggca
94441 cctggagccc tggggccctg ggacaagttt cagctgggag tgggtatgga gagtggatgt
94501 caggtggggg caagaggggc catgtccttc tgactctgcc tccctgtctc atgcctcccc
94561 aggaccgcca tgaagctggg cttcagntag gccgtggccg ganagccatg cagctgatca
94621 cgnnggccag cccnaacatg agcgcctcgg ccatgttgag ctacttcaag ccgctgctgg
94681 anctggctcc gcacggagaa cgagctgcat ggggagaagc tgggctggcc gcagtacaac
94741 tggacgnccg aactccggta ccgccaccca ccccacctcc agccttgggt cttaacccc
94801 tccccaggct gggcagccat gcggctgacn ctncggagcc tggccctgcc ccgcacccct
94861 gccctgccct gccctgccct gcccatgctg tctccttgct tcccgctcag ctcgctcaga
94921 agggcccctc ccagacagcg gccgcgtcag cttncctggg cctggacctg gatgcgcagg
94981 aggcccgcgt gggcncagnt ggctgctgct cttcctgggc atcgccctgn ctggtagcca
95041 ccctgggcct cagccagcgg ctncttncag catccgccac cgcagcctcc accggcactc
95101 ccacgggccc cagttcggct ccgaggtgga gctgagacac tcctgaggtg acccggctgg
95161 gtcggccctg cccaagggcc tcccaccaga gactgggatg ggaacactgg tgggcagctg
95221 aggacacacc ccacaccca gcccaccctg ctcctcctgc cctgtccctg tccctccc
95281 ctcccagtcc tccagaccac cagccgcccc agcccttct cccagcacac ggctgcctga
95341 cactgagccc cacctctcca agtctctctg tgaatacaat taaaggtcct gccctccca
95401 tctgagtctg tgtccctcac agggaagcca gggacaggga caggctgctt tcctgcctcc
95461 tggcagtcaa gtgggtcccg ttactaggtt tgttcctcca tcctccttca ggagccgggg
95521 aggatcccca gagctctgcc ccagcacctn cctggcntgg cgcctgnntc ttccctccag
95581 cccaggcagc ccgccactgt cctgccaccg caggcagccc ctgtctggcc caagcactga
95641 cccacgcgga ctctgggaag cagacatcct gggctgctgg cctcacattt ccactggcag
95701 tggagccttt ccctgctcca caaatggcca ggtccccca ggggaaggct tccggctgtt
95761 atcggctgcc tcaggggggcg agtaccttgg agggcctgct tcaanggagg gtgcccctg
95821 gaggcacac accagcctag tgcttacctt ggctcctgcc tgtaccagct ccatgactct
95881 gctcgggtga acagccttgg ctctcagaca gccattctaa cactgccagt gcagaggggc
95941 ctcagacgct ggagtgtagc agtggctgca cctgcacagg gattagctgc cagcagccac
96001 cctgctggcg tcccagcaca cacctcctca ctccctgcat tggagggagt gtcattttaa
96061 gggacatttt tatgactttt atgtgtatgt ttatgtagaa atttggaaaa tacagaaaac
96121 tgtaaagaaa ataaaagccc tttatatcaa cgtcaagaga taagccctgt tgacgttttg
96181 gtgtacaact tgccggactt cttctcagca catgtgtatt ttaaatggga tcacaccata
96241 tttacagtca tacatccttt tatcacttca tacaactaga tctgtttttc tgatatttaa
96301 atgccagact tcgaacttgg ccaatagaag ttggtccatt tgctggggcc aggggctccc
96361 cagccacccg ggccctctg tcaaaccctc agccctgagt ctcttctggg ctttgctgat
96421 gtcttcaccc tagctaggtc catctcccaa tatctgtccc ccttagtcca cagcttttgc
96481 cccccaatcc aggtgccgtg cgtgtctctg tgtgtccgtg tctgtgtgtg cgttgtacac
96541 aggcttggct gttacaggcc cattctgtaa ggcaggatgt ggggctgagg tattttagga
96601 ttgaaagagg gtggaagttt atgattacat aggacaatgg aatttataaa catgtcctct
```

FIGURE 3 (continued)

```
96661 aaatggttcc gagtcatcta ccaatgaaga cttcttgaat tatcccccct tttcccagcc
96721 tgttttgaaa gctctttgtt taccagacaa aggtcatcaa tcatatgacc ccctttgcct
96781 tttttttttt tttaagatgg agtctcgctc ttgttgccca ggctagagtg cagtggtgtg
96841 atctcggctc actgtaacct ccacctcctg gctttcaagc gattctcctg cctcagcctt
96901 ccgagtagct gggattacag gcgcccacca ccatgcctgg ctaaattttt gtattttag
96961 tagagatggg gtttaatcat gttggccagg ctggtctcga attcctgacc tcaggtgatc
97021 cacccacctc ggcctcccaa agtgctggaa ttacaggcat gagccaccat gcctggcccc
97081 cgtttcctat ttttatgaac cacagcggtt catgctgcct gtcagagctt ctgggccgcg
97141 tgaggtcacc agctttcaac acgcaaagga ctgcactgca gctgggggaa gagaaactcc
97201 acactgcatt ggcctggcca gccttaccct ctgggctttt gaaatagtat cttttttctg
97261 tttgttttca aacagagtct cgctctgtcg cccaggctgg agtgctggag tgcagtggcc
97321 tgatctcggc tcactgcaac ctccacctcc caagttcaag cgattctcct gcctcagcct
97381 cccgagtagc tgggctacta cttncaggcg cacgccgccn atgcccagct aatttctttt
97441 gtattttagt agagatggag tttcaccatg ttgcccaggc tggtcttgaa ctcctgagct
97501 caggcaatcc gcccgcctca gcctctcaaa gtgctaggat tancaggcgt gagccaccgc
97561 gcccggccca atagtatcat tctttagatg cctgcctctg cctccttggg tgagtgggga
97621 gaggcagggg atacctggaa agtagcagag gaagaggagg cggtaacagc aggaagaggg
97681 ccagcccagt gttttctact ggtggccctg aaggctgagc ccatccccgt gccgtgcctg
97741 ccaatgccgc tcttgggaga ccagctctca cctacgctag ccacaggtgg tggctgccag
97801 acagtttctc tgatccccac agccctcccc accctctacc ttcctctgtc tgcctaaccc
97861 ccttcccacc caccctggct tttaacataa gtgaaaaagt ggctaacccc acctctgcac
97921 ttatcacctg tgtgaccttg ggcagtttgt ttttgcagtc tgcattttct tttcttttct
97981 tttttttttt tttttttttt tgagatggag tctcgctctg tcacccaggc tggagtgcag
98041 tggcgtgatc tcggctcacc gcaagcttgg cctcctgggt tcacgccatt ctcctgcctc
98101 agcctcccga gtagctggga ctacaggcgc cagccaccac gcccggttaa ttttttgtat
98161 ttttagtaga gacagggttt caccgtgtta gccaggatgg tctcaatctc ctgacctcgt
98221 gatttgcctg cctcggcctc ccagagtgct gggattacag gcgtgagcca ccgcgcccag
98281 cctgcgtttt ctttcttacg gttcttatca accctctcag cgttgccatg aagatgaaat
98341 gagatgatgt acaaagtcct agtagagtgt cttctcttta taatgaatgc atcgtctcct
98401 gagaaagcta gtttcataac aaccccagat cagccaagtc cagatcagcc ctctcacttg
98461 agacaggaag aggacccggg gcaactgggt gccggagctg gactgaaaac tcccatctcc
98521 cagctgcctt ccaggaactt ccccaccaca cgtccttgca caaccagtca actgtcttct
98581 tactgggagc acacagagct cgtccactgg gggcccacag cttgcctcag ttccaggagt
98641 actcagccat ctccctgtgt cgcctctccc tcatcatccc tcccatgtc acatctccct
98701 cagcctctcc gtgttacctc tccctcatcc tccctqccca tgttgcctct ccctcatcct
98761 ctctctcatc ctccctgccc gtgtcgcctc ttcctcatcc tctccctcat cctctccctc
98821 ttcctctct
```

# FIGURE 4

```
   1   mgaasgrrgp gl111plp111 11ppqpalal dpglqpgnfs adeagaqlfa qsynssaeqv
  61   lfqsvaaswa hdtnitaena rrqeeaalls qefaeawgqk akelyepiwq nftdpqlrri
 121   igavrtlgsa nlplakrqqy nallsnmsri ystakvclpn ktatcwsldp dltnilassr
 181   syamllfawe gwhnaagipl kplyedftal sneaykqdgf tdtgaywrsw ynsptfeddl
 241   ehlyqqlepl ylnlhafvrr alhrrygdry inlrgpipah llgdmwaqsw eniydmvvpf
 301   pdkpnldvts tmlqqgwnat hmfrvaeeff tslelspmpp efwegsmlek padgrevvch
 361   asawdfynrk dfrikqctrv tmdqlstvhh emghiqyylq ykdlpvslrr ganpgfheai
 421   gdvlalsvst pehlhkigll drvtndtesd inyllkmale kiaflpfgyl vdqwrwgvfs
 481   grtppsrynf dwwylrtkyq gicppvtrne thfdagakfh vpnvtpyiry fvsfvlqfqf
 541   healckeagy egplhqcdiy rstkagaklr kvlqagssrp wqevlkdmvg ldaldaqpll
 601   kyfqpvtqwl qeqnqqngev lgwpeyqwhp plpdnypegi dlvtdeaeas kfveeydrts
 661   qvvwneyaea nwnyntnitt etskillqkn mqianhtlky gtqarkfdvn qlqnttikri
 721   ikkvqdlera alpaqeleey nkilldmett ysvatvchpn gsclqlepdl tnvmatsrky
 781   edllwawegw rdkagrailq fypkyvelin qaarlngyvd agdswrsmye tpsleqdler
 841   lfqelqplyl nlhayvrral hrhygaqhin legpipahll gnmwaqtwsn iydlvvpfps
 901   apsmdtteam lkqgwtprrm fkeaddffts lgllpvppef wnksmlekpt dgrevvchas
 961   awdfyngkdf rikqcttvnl edlvvahhem ghiqyfmqyk dlpvalrega npgfheaigd
1021   vlalsvstpk hlhslnllss eggsdehdin flmkmaldki afipfsylvd qwrwrvfdgs
1081   itkenynqew wslrlkyqgl cppvprtqgd fdpgakfhip ssvpyiryfv sfiiqfqfhe
1141   alcqaaghtg plhkcdiyqs keaggqrlata mklgfsrpwp eamqlitgqp nmsasamlsy
1201   fkplldwlrt enelhgeklg wpqynwtpns arsegplpds grvsflgldl daqqarvgqw
1261   lllflgiall vatlglsqrl fsirhrslhr hshgpqfgse velrhs
```

# FIGURE 5

```
   1    gaattcatgc  cccttttgaa  atagacttat  gtcattgtca  gaaaacataa  gcatttatgg
  61    tatatcatta  atgagtcacg  attttagtgg  ttgccttgtg  agtaggtcaa  atttactaag
 121    cttagatttg  ttttctcaca  tattctttcg  gagcttgtgt  agtttccaca  ttaatttacc
 181    agaaacaaga  tacacactct  ctttgaggag  tgccctaact  tcccatcatt  ttgtccaatt
 241    aaatgaattg  aagaaattta  atgtttctaa  actagaccaa  caaagaataa  tagttgtatg
 301    acaagtaaat  aagctttgct  gggaagatgt  tgcttaaatg  ataaaatggt  tcagccaaca
 361    agtgaaccaa  aaattaaata  ttaactaagg  aaaggtaacc  atttctgaag  tcattcctag
 421    cagaggactc  agatatatat  aggattgaag  atctctcagt  taagtctaca  tgaaaaggat
 481    ggtttcttgg  agcttccaca  aacttaaaac  catgaaacat  ctattattgc  tactattgtg
 541    tgttttttcta  gttaagtccc  aaggtgtcaa  cgacaatgag  gaggtgaatt  ttttaaagca
 601    ttattatatt  attagtagta  ttattaatat  aagatgtaac  ataatcatat  tatgtgctta
 661    ttttaatgaa  attagcattg  cttatagtta  tgaaatggaa  ttgttaacct  ctgacttatt
 721    gtatttaaag  aatgtttcat  agtatttctt  atataaaaac  aaagtaattt  cttgttttct
 781    agtttatcac  ctttgttttc  ttaagatgag  gatggcttag  ctaatgtaag  atgtgttttt
 841    ctcacttgct  attctgagta  ctgtgatttt  catttacttc  tagcaataca  ggattacaat
 901    taagaggaca  agatctgaaa  atctcacaaa  ctataaaata  ataaaagagc  agaatttaa
 961    gataaaagaa  actggtggta  ggtagattgt  tctttggtga  aggaaggtaa  tatatattgt
1021    tactgagatt  actatttata  aaaattataa  ctaagcctaa  aagcaaaata  catcaagtgt
1081    aatgatagaa  aatgaaatat  tgctttttc  agatgaaaag  ttcaaattag  agttagtgtg
1141    tattgttatt  attaatagtt  atgaaacacg  gttcagtcta  atttatttat  ttgtagaaca
1201    gtttgtcctc  aactattatt  tttgctgact  tattgctgtt  aatttgcagt  tactaaaaat
1261    acagaaatgc  atttaggaca  atggatattt  aagaaattta  aattttatca  tcaaacgtat
1321    catggccaaa  tttcttacat  atagcatagt  atcattaaac  tagaaataag  aatacacaat
1381    aatatttaaa  tgaagtgatt  catttcggat  cattattgag  tttcaaggga  acttgagtgt
1441    tgtacttatc  agactctaca  tgtaagaaca  tatagttaat  ctggttgtgt  gtgtaaaaac
1501    atatggttaa  tctggttaag  tctggttaat  catattaggt  aagaaaaatg  taaagaatgt
1561    gtaagacgaa  attttttgtaa  agtactctgc  aaagcacttt  cacatttctg  cttatcaact
1621    aaacctcaca  gagatagttt  aatagtttag  gctttaaaat  ggattttgat  tattcaacaa
1681    gtggccttca  taatttcttt  aagtgttttt  ctttaagtat  atactttctt  taaatatttt
1741    ttaaaatttc  cttttctcta  gtaaagccag  accatccatg  ctacctctct  agtggcactc
1801    tgaaataaaa  agaaaatagt  tttctctgtt  ataattgtat  ttgtaataag  cagatgaatc
1861    acatttctta  aaatttgttt  tagagagggt  aagctctgac  taggaccatg  acttcaatgt
1921    gaaatatgta  tatatcctcc  gaatctttac  atattaagaa  tgtatatagt  caactggtta
1981    aacaggaaaa  tctggaacag  cctggctggg  ttttaatctt  agcaccatcc  tactaaatgt
2041    taaataatat  tataatctaa  tgaataaatg  acaatgcaat  tccaaataga  gttcatctga
2101    tgacttctag  actcacaaaa  ttgcaagaga  gctcagttgt  tgctcagttg  ttccaaatca
2161    tgtcgtttgt  taatttgtaa  ttaagctcca  aaggatgtat  agctactgac  aaaaaaaaaa
2221    atgagaatgt  agttaatcca  aatcaaaact  ttcctattgc  aatgcgtatt  ttctgcttca
2281    ttatccttta  atataatatt  ttaagttagc  aagtaatttt  aattacaatg  cacaagcctt
2341    gagaattatt  ttaaatataa  gaaaatcata  atgtttgata  aagaaatcat  gtaagaaatt
2401    tcaagataat  ggtttaacaa  ataattttgt  tgatagaaga  taagactaaa  agtgaaattc
2461    gaagtggaga  ggacacttaa  actgtagtac  ttgttatgtg  tgattccagt  aaaaatagta
2521    atgagcactt  attattgcca  agtactgttc  tgagggtacc  atatgcaata  agttatttaa
2581    tccttacaat  aatcttgtaa  ggcagattca  aactatcatt  acacttattt  tacagatgag
2641    aaaactgggg  cacagataaa  gcaacttgcc  caaggtctca  tagctgtaag  tcaaccctac
2701    ggtcaagacc  tacaagtagc  cgagctccag  agtacattat  gagggtcaaa  gattgtctta
2761    ttacaaataa  attccaagta  gaatcaacct  ttaataagtc  tttaatgtct  cttaaatatg
2821    tttatatagg  agtctaatca  ccaattcaca  aaaatgaaag  tagggaaatg  attaacaata
2881    atcataggaa  tctaacaatc  caagtggctt  gagaatattc  attcttcttg  acagtataga
2941    ttctttacaa  tttcgtaagt  tccaatgtat  gttttaggaa  tatgaggtca  ttactattca
3001    taatctgata  cagctttatc  ctaaggcctc  tctttaaaaa  ctacactgca  tcatagcttt
```

## FIGURE 5 (continued)

```
3061 tttgtgcagt tggtcttct actgttactg aacagtaagc aacctacaga ttcactatca
3121 ccaaccagcc agttgatgga tcttaagcaa attatcaagc ttgtgataac ctaaattata
3181 aaatgagggt gttggaatag ttacattcca aatcttctat aacactctgt attatatttc
3241 tgcctcattc cttgtagggt ttcttcagtg cccgtggtca tcgacccctt gacaagaaga
3301 gagaagaggc tcccagcctg aggcctgccc caccgcccat cagtggaggt ggctatcggg
3361 ctcgtccagc caaagcagct gccactcaaa agaaagtaga aagaaaagcc cctgatgctg
3421 gaggctgtct tcacgctgac ccagacctgg tgggtgcact gatgtttctt gcagtggtgg
3481 ctctctcatg cagagaaagc ctgtagtcat ggcagtctgc taatgtttca ctgacccaca
3541 ttaccatcac tgttattttg tttgtttatt ttggaaataa aattcaaaac ataaacatat
3601 tgggcctttg gtttaggctt tctttcttgt tttctttggt ctgggcccaa aatttcaaat
3661 taggatatgt gggtgccacc tttccatttg tattttgcca ctgcctttgt ttagttggta
3721 aaattttcat agcccaatta tatttttct ggggtaagta atattttaaa tctctatgag
3781 agtatgatga tgactttcga atttctggtc ttacagaaaa ccaaataata aatttttatg
3841 ttggctaatc gtatcgctga attttcctat gtgctatttt aacaaatgtc catgacccaa
3901 atccttcatc taatgcctgc tattttcttt gttttaggg ggtgttgtgt cctacaggat
3961 gtcagttgca agaggctttg ctacaacagg aaaggccaat cagaaatagt gttgatgagt
4021 taaataacaa tgtggaagct gtttcccaga cctcctcttc ttcctttcag tacatgtatt
4081 tgctgaaaga cctgtggcaa aagaggcaga agcaagtaaa aggtagatat ccttgtgctt
4141 tccattcgat tttcagctat aaaattggaa ccgttagact gccacgagaa tgcatggttg
4201 tgagaagatt aacatttctg ggttagtgaa tagcattcat acgcttttgg gcaccttccc
4261 ctgcaacttg ccagataagc actattcagc tcttattccc agtctgacat cagcaagtgt
4321 gattttctat gaaaaattct actatgactc cttattttaa gtatacaaga aacttgtgac
4381 tcagaagata atatttacag agtggaaaaa aaccctagc atttatagtt ttaacatttg
4441 aggttttgaa tgagagagtt atccataata tattcaattg tgttgtggat aatgacacct
4501 aacctgtgaa tcttgaggtc agaatgttga gtgctgttga cttggtggtc aggaaacagc
4561 tagtgcgtga gcctggcaca ggcatctcag tgagtagcat acccacagtt ggaaattttt
4621 caaagaaatc aaaggaatca tgacatctta taaatttcaa ggttctgcta tacttatgtg
4681 aaatggataa ataaatcaag catatccact ctgtaagatt gaacttctca gatggaagac
4741 cccaatactg ctttctcctc ttttccctca ccaaagaaat aaacaaccta tttcatttat
4801 tactggacac aatctttagc gtataccat ggtaaattac tagtatggtg gttaggattt
4861 atgttaattt gtatatgtca tgcgccaaat catttccact aaatatgact atatatcata
4921 actgcttggt gatagctcag tgtttaatag tttattctca gaaaatcaaa attgtatagt
4981 taaatacatt agtttatga ggcaaaaatg ctaactattt ctacataatt tcattttcc
5041 agataatgaa aatgtagtca atgagtactc ctcagaactg gaaaagcacc aattatatat
5101 agatgagact gtgaatagca atatcccaac taaccttcgt gtgcttcgtt caatcctgga
5161 aaacctgaga agcaaaatac aaaagttaga atctgatgtc tcagctcaaa tggaatattg
5221 tcgcacccca tgcactgtca gttgcaatat tcctgtggtg tctggcaaag gtaactgatt
5281 cataaacata tttttagaga gttccagaag aactcacaca ccaaaaataa gagaacaaca
5341 acaacaacaa aaatgctaag tggatttcc caacagatca taatgacatt acagtacatc
5401 ataaaaatat ccttagccag ttgtgtttg gactggcctg gtgcatttgc tggttttgat
5461 gagcaggatg gggcacaggt agtcccaggg gtggctgatg tgtgcatctg cgtactggct
5521 tgaacagatg gcagaaccac agatagatgt agaagtttct ccattttgtg tgttctggga
5581 gctcatggat attccaggac acaaaaggtg gagaagagct ttgttcatcc tcttagcaga
5641 taaacgtcct caaaactggg ttggacttac taaagtaaaa tgaaaatcta atatttgtta
5701 tattattttc aaaggtctat aataacacac tccttagtaa cttatgtaat gttatttaa
5761 agaattggtg actaaataca aagtaattat gtcataaacc cctgaacata atgttgtctt
5821 acatttgcag aatgtgagga aattatcagg aaaggaggtg aaacatctga aatgtatctc
5881 attcaacctg acagttctgt caaaccgtat agagtatact gtgacatgaa tacagaaaat
5941 ggaggtaagc tttcgacagt tgttgacctg ttgatctgta attatttgga taccgtaaaa
6001 tgccaggaaa caaggccagg tgtggtggct catacctgta attccagcac cttgggaggc
6061 caaagtgggc tgatagcttg agcctaggag tttgaaacta gcctgggcaa cataatgaga
6121 ccctaactct acaaaaaaaa aaaaaatacc aaaaaaaaaa aaaaaatcag ctgtgttggt
```

FIGURE 5 (continued)

```
6181 agtatgtgcc tgtagtccca gctatccagg aggctgagat gggagatcac ctgagcccac
6241 aacctggagt cttgatcatg ctactgaact gtagcctggg caacagagga tagtgagatc
6301 ctgtctcaaa aaaaaaaatt aattaaaaag ccaggaaaca agacttagct ctaacatcta
6361 acatagctga caaaggagta atttgatgtg gaattcaacc tgatatttaa aagttataaa
6421 atatctataa ttcacaattt ggggtaagat aaagcacttg cagtttccaa agattttaca
6481 agtttacctc tcatatttat ttccttattg tgtctatttt agagcaccaa atatatacta
6541 aatggaatgg acagggatt cagatattat tttcaaagtg acattatttg ctgttggtta
6601 atatatgctc tttttgtttc tgtcaaccaa aggatggaca gtgattcaga accgtcaaga
6661 cggtagtgtt gactttggca ggaaatggga tccatataaa cagggatttg gaaatgttgc
6721 aaccaacaca gatgggaaga attactgtgg cctaccaggt aacgaacagg catgcaaaat
6781 aaaatcattc tatttgaaat gggatttttt ttaattaaaa aacattcatt gttggaagcc
6841 tgttttaggc agttaagagg agtttcctga caaaaatgtg gaagctaaag ataagggaag
6901 aaaggcagtt tttagtttcc caaaattta tttttggtga gagattttat tttgttttc
6961 ttttaggtga atattggctt ggaaatgata aaattagcca gcttaccagg atgggaccca
7021 cagaactttt gatagaaatg gaggactgga aaggagacaa agtaaaggct cactatggag
7081 gattcactgt acagaatgaa gccaacaaat accagatctc agtgaacaaa tacagaggaa
7141 cagccggtaa tgccctcatg gatggagcat ctcagctgat gggagaaaac aggaccatga
7201 ccattcacaa cggcatgttc ttcagcacgt atgacagaga caatgacggc tggtatgtgt
7261 ggcactcttt gctcctgctt taaaaatcac actaatatca ttactcagaa tcattaacaa
7321 tatttttaat agctaccact tcctgggcac ttactgtcag ccactgtcct aagctcttta
7381 tgcatcactc gaaagcattt caactataag gtagacattc ttattctcat tttacagatg
7441 agatttagag agattacgtg atttgtccaa tgtcacacaa ctacccagag ataaaactag
7501 aatttgagca cagttacttt ctgaataatg agcatttaga taaataccta tatctctata
7561 ttctaaagtg tgtgtgaaaa ctttcatttt catttccagg gttctctgat actaagggtt
7621 gtaaaagcta ttattccagt ataaagtaac aaacacagtc cctagatgga ttgccacaaa
7681 ggcccagtta tctctctttc ttgctatagg gcacaggagg tctttggtgt attagtgtga
7741 ctctatgtat agcacccaaa ggaaagacta ctgtgcacac gagtgtagca gtcttttatg
7801 ggtaatctgc aaaacgtaac ttgaccaccg tagttctgtt tctaataacg ccaaacacat
7861 tttctttcag gttaacatca gatcccagaa aacagtgttc taaagaagac ggtggtggat
7921 ggtggtataa tagatgtcat gcagccaatc caaacggcag atactactgg ggtggacagt
7981 acacctggga catggcaaag catggcacag atgatggtgt agtatggatg aattggaagg
8041 ggtcatggta ctcaatgagg aagatgagta tgaagatcag gcccttcttc ccacagcaat
8101 agtccccaat acgtagattt ttgctcttct gtatgtgaca acattttgt acattatgtt
8161 attggaattt tctttcatac attatattcc tctaaaactc tcaagcagac gtgagtgtga
8221 cttttgaaa aaagtatagg ataaattaca ttaaaatagc acatgatttt cttttgtttt
8281 cttcatttct cttgctcacc caagaagtaa caaaagtata gttttgacag agttggtgtt
8341 cataatttca gttctagttg attgcgagaa ttttcaaata aggaagaggg gtcttttatc
8401 cttgtcgtag gaaaaccatg acggaaagga aaaactgatg tttaaaagtc cacttttaaa
8461 actatattta tttatgtagg atctgtcaaa gaaaacttcc aaaaagattt attaattaaa
8521 ccagactctg ttgcaataag ttaatgtttt cttgtttgt aatccacaca ttcaatgagt
8581 taggctttgc acttgtaagg aaggagaagc gttcacaacc tcaaatagct aataaaccgg
8641 tcttgaatat ttgaagattt aaaatctgac tctaggacgg gcacggtggc tcacgactat
8701 aatcccaaca ctttgggagg ctgaggcggg cggtcacaag gtcaggagtt caagaccagc
8761 ctgaccaata tggtgaaacc ccatctctac taaaaataca aaaattagcc aggcgtggtg
8821 gcaggtgcct gtaggtccca gctagcctgt gaggtggaga ttgcattgag ccaagatc
```

# FIGURE 6

```
1    mkrmvswsfh klktmkhlll lllcvflvks qgvndneegf fsarghrpld kkreeapslr
61   papppisggg yrarpakaaa tqkkverkap daggclhadp dlgvlcptgc qlqeallqqe
121  rpirnsvdel nnnveavsqt ssssfqymyl lkdlwqkrqk qvkdnenvvn eysselekhq
181  lyidetvnsn iatnlrvlrs ilenlrskiq klesdvsaqm eycrtpctvs cnipvvsgke
241  ceeiirkgge tsemyliqpd ssvkpyrvyc dmntenggwt viqnrqdgsv dfgrkwdpyk
301  qgfgnvatnt dgknycglpg eywlgndkis qltrmgptel liemedwkgd kvkahyggft
361  vqneankyqi svnkyrgtag nalmdgasql mgenrtmtih ngmffstydr dndgwltsdp
421  rkqcskedgg gwwynrchaa npngryywgg qytwdmakhg tddgvvwmnw kgswysmrkm
481  smkirpffpq q
```